

Jacket # 68563-2

# BPPU PRAT ACTION GUIDELINES

Printed Name: Janet Anderson

REVIEWER: Rosemary Biancardi

(ASSIGNED BY: Richard King)

EPA REG./FILE SYMBOL 108563-2

ACTION CODE 332

SUBMISSION BARCODE S567427

Date on Application 6/18/99

EPA Received Date 6/23/99

PM Received Date 7/30/99

Assigned in PRAT YES X NO   

Completed by: SKR Date 8/30/99

*Notification*

## FINAL ACTION

Response Code           

Response Date:    /    /   

MC            (1) Cite All

           (4) Not Applicable

           (8) Selective

*Please reassign  
in PRAT  
SKR*

CRP: Yes        No       

Restricted Use: Yes        No       

Manufacturing Use: Yes        No       

Exclusive Use: Yes        No

68563-2

**Snyder Seed Corporation**

255 Great Arrow Avenue

Buffalo, NY 14207

Ph. 716 873 6248

Fax. 716 873 8116

Document Processing Desk  
Office of Pesticide Programs (7504C)  
US Environmental Protection Agency  
401 M. Street SW  
Washington, DC 20460-0001  
Attn: Mr. Richard King

June 18, 1999

Dear Richard:

Please find enclosed a notification form for the modification of our Seed Saver product. In short, we will deliver the capsaicin via liquid at one-half the concentration of the powdered pepper, but use twice as much to have the final "heat strength" on the birdseed be the same. The new inerts are GRAS [REDACTED] We anticipate that this new version will be more friendly.

I tried unsuccessfully this week to reach you to discuss proper procedures. I have spent a lot time reading title 40 CFR Parts 150-170. However, I am still somewhat confused. I plan to phone you next week to discuss this matter further.

Very truly yours,

  
John H. Edholm

**\*Inert ingredient information may be entitled to confidential treatment\***

FROM: BUN, N.Y., T.D.C.

716 836 3630

1999-06-18

11:24

#377 P.01/01



United States  
Environmental Protection Agency  
Washington, DC 20460

☐ Registration  
☐ Amendment  
☐ Other

OPP Identifier Number

### Application for Pesticide - Section I

1. Company/Product Number SNYDER SEED	2. EPA Product Manager Richard King	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company Product (Name) Liquid Seed Saver	PM#	
5. Name and Address of Applicant (Include ZIP Code) Squirrel Free, Inc. A Subsidiary of Snyder Seed Corp. 255 Great Arrow Avenue Buffalo, NY 14207 <input checked="" type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. 68563-2 Product Name Seed Saver	

### Section - II

<input type="checkbox"/> Amendment - Explain below	<input type="checkbox"/> Final printed labels in response to Agency letter dated
<input type="checkbox"/> Resubmission in response to Agency letter dated	<input type="checkbox"/> "Me Too" Application
<input checked="" type="checkbox"/> Notification - Explain below	<input type="checkbox"/> Other - Explain below

Notification: Use additional pages to explain the notification. The active ingredient in our current powdered Seed Saver is Capsaicin at 1.08%. We are introducing a liquid Seed Saver with 0.54% capsaicin. Powdered Seed Saver is used at 1 part to 120 parts of bird seed. The directions for use for the new liquid product will be 1 part to 60 parts so that the final heat strength on the seed will be the same. The new inerts are GRAS [REDACTED]

### Section - III

1. Material This Product Will be Packaged In			
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other (Specify)
2. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container	3. Size(s) Retail Container 16oz	4. Location of Label Directions <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container	5. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other

### Section - IV

1. Contact Person for identification of individual to be contacted, if necessary, to process this application.		
Name	Title	Telephone No. (Include Area Code) 716-873-6248
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature	3. Title	
4. Typed Name	5. Date	

# BPPL PRAT ACTION CODING FORM

PM 90: Janet Andersen

REVIEWER: Will Klot

(ASSIGNED BY: S-203100)

EPA REG./FILE SYMBOL 68563-1

ACTION CODE 332

SUBMISSION BARCODE 5553796

Date on Application

11-13-98

EPA Received Date

11-24-98

PM Received Date

12-15-98

Assigned in PRAT YES ☒

NO ☐

Completed by: S. Diana Hudson

Date 12-15-98

.....

## FINAL ACTION

Response Code \_\_\_\_\_

Response Date: / /

V S: \_\_\_\_\_ (1) Cite-All

\_\_\_\_\_ (4) Not Applicable

\_\_\_\_\_ (8) Selective

CRP: Yes \_\_\_\_\_ No \_\_\_\_\_

Restricted Use: Yes \_\_\_\_\_ No \_\_\_\_\_

Manufacturing Use: Yes \_\_\_\_\_ No \_\_\_\_\_

Exclusive Use: Yes \_\_\_\_\_ No \_\_\_\_\_

Notification

Log off

PRATS

No Response

Renew

**Snyder Seed Corporation**

*Notification  
No Change*

Snyder Seed Corporation  
1576 Sweet Home Road  
Amherst, New York 14228

716-636-5107 (phone)  
716-636-3630 (fax)

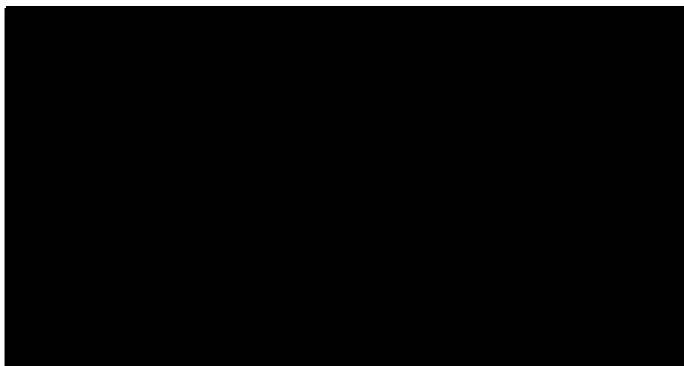
Nov. 13, 1998

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
401 M Street S.W.  
Washington, D.C. 20460-0001

Re: Squirrel Free Inc.'s Seed Saver (E.P.A. Registration Number 68563-2)  
NOTIFICATION

Dear Sir/Madam;

Pursuant to EPA PR notice 95-2 and chapter 152.46 of CRF 40, I am notifying your office of the following changes to our pesticide registration for our **Seed Saver Product**. For cost reasons, we are changing our provider of the source ingredients for this product, Oleoresin of Capsicum and Ground Capsicum, from



*06/25/99  
EPA  
no registration  
↓ BP*

The analytical specifications of the Oleoresin of Capsicum and Ground Capsicum remain unchanged.

Enclosed please find EPA form 8570-1 and a signed statement of understanding concerning this notification. If you have any questions contact us by phone or by fax at the above numbers.

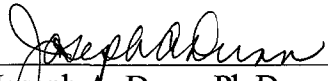
Sincerely,

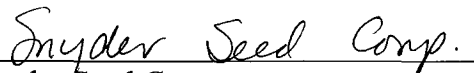
*Joseph A. Dunn*

Joseph A. Dunn, Ph.D.  
President

**\*Product ingredient source information may be entitled to confidential treatment\***

This notification is consistent with the provisions of PR notice 95-2 and EPA regulations at 40-CFR 152.46, and no other changes have been made to the labeling or Confidential Statement of Formula of this product. I understand that it is a violation of 18 U.P.C. section 1001 to willfully make any false statement to EPA. I understand that if this notification is not consistent with the terms of PR notice 95-2 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under section 12 and 14 of FIFRA.

  
\_\_\_\_\_  
Joseph A. Dunn, Ph.D.

  
\_\_\_\_\_  
Snyder Seed Corp.

Nov. 13, 1998



United States  
Environmental Protection Agency  
Washington, DC 20480

☐ Registration  
☐ Amendment  
☒ Other

OPP Identifier Number

257620

## Application for Pesticide - Section I

1. Company/Product Number 68563-2	2. EPA Product Manager Dr. Roy Sjoblad	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Seed Saver	PM# 91	
5. Name and Address of Applicant (Include ZIP Code) Squirrel Free Inc. A subsidiary of Snyder Seed Corp. 1576 Sweet Home Rd. Amherst, N.Y. 14228 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

## Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of "other revisions" per PR Notice 95-2 (II.A.12)

## Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Metal	
* Certification must be submitted	If "Yes" Unit Packaging wgt. 3 oz.	No. per container 1	If "Yes" Package wgt.	<input type="checkbox"/> Plastic	
				<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				Other (Specify): _____	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 3 oz.		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

## Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Joseph A. Dunn		Title President		Telephone No. (Include Area Code) (716) 636-5107	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamp)
2. Signature 		3. Title President			
4. Typed Name Joseph A. Dunn		5. Date Nov. 13, 1998			



**Snyder Seed Corporation**

Snyder Seed Corporation  
1576 Sweet Home Road  
Amherst, New York 14228

716-636-5107 (phone)  
716-636-3630 (fax)

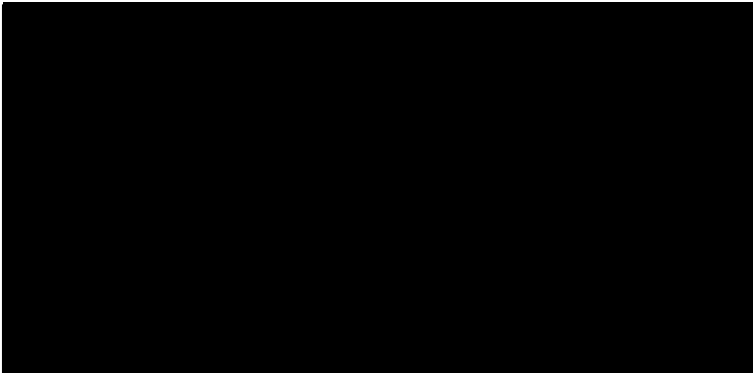
Nov. 13, 1998

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
401 M Street S.W.  
Washington, D.C. 20460-0001

Re: Squirrel Free Inc.'s Suet with Pepper Treat™ (E.P.A. Registration Number 68563-3)  
NOTIFICATION

Dear Sir/Madam;

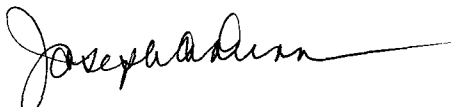
Pursuant to EPA PR notice 95-2 and chapter 152.46 of CRF 40, I am notifying your office of the following changes to our pesticide registration for our **Suet with Pepper Treat™**. For cost reasons, we are changing our provider of the source ingredients for this product, Oleoresin of Capsicum and Ground Capsicum, from



The analytical specifications of the Oleoresin of Capsicum and Ground Capsicum remain unchanged.

Enclosed please find EPA form 8570-1 and a signed statement of understanding concerning this notification. If you have any questions please contact us by phone or by fax at the above numbers.

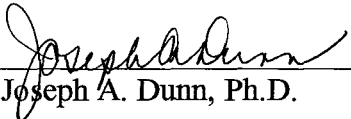
Sincerely,

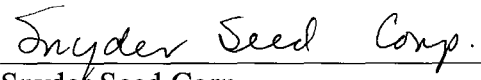


Joseph A. Dunn, Ph.D.  
President

**\*Product ingredient source information may be entitled to confidential treatment\***

This notification is consistent with the provisions of PR notice 95-2 and EPA regulations at 40-CFR 152.46, and no other changes have been made to the labeling or Confidential Statement of Formula of this product. I understand that it is a violation of 18 U.P.C. section 1001 to willfully make any false statement to EPA. I understand that if this notification is not consistent with the terms of PR notice 95-2 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under section 12 and 14 of FIFRA.

  
\_\_\_\_\_  
Joseph A. Dunn, Ph.D.

  
\_\_\_\_\_  
Snyder Seed Corp.

Nov. 12, 1998



United States  
Environmental Protection Agency  
Washington, DC 20480

☐ Registration  
☐ Amendment  
☒ Other

OPP Identifier Number

257620

## Application for Pesticide - Section I

1. Company/Product Number 68563-3	2. EPA Product Manager Dr. Roy Sjoblad	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Suet with Pepper Treat	PM#	
5. Name and Address of Applicant (Include ZIP Code) Squirrel Free Inc. A subsidiary of Snyder Seed Corp. 1576 Sweet Home Rd. Amherst, N.Y. 14228 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

## Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of "other revisions" per PR Notice 95-2(II.A.12)

## Section - III

1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt. 13.5 oz.	No. per container 1	If "Yes" Package wgt.	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 13.5oz.		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____			

## Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Joseph A. Dunn	Title President	Telephone No. (Include Area Code) (716) 636-5107
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		3. Date Application Received (Stamped)
2. Signature 	3. Title President	
4. Typed Name Joseph A. Dunn	5. Date Nov. 13, 1998	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

NOV 19 1998

Mr. William D. Schregel  
Synder Seed Corporation Inc.  
1576 Sweet Home Road  
Amherst, NY 14228


Subject: Product Labeling for Seed Saver®  
EPA Registration Number 68563-2

Dear Mr. Schregel:

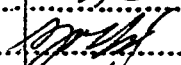
Thank you for your FAX dated October 29, 1997 regarding the assignment of the wrong registration number on the label for Synder Seed Corporation's, Seed Saver®. Please accept our apology for this error and any inconvenience to your company. As you requested, we have approved your proposed label amendment (mixing directions) and enclosed is a stamped copy of the product label.

If you have any questions, please do not hesitate to contact Richard King at (703) 308-8052.

Sincerely,

  
Janet L. Andersen, PhD.  
Director  
Biopesticide and Pollution  
Prevention Division (7501C)

enclosure:

CONCURRENCES							
SYMBOL	7511 C	7511 C					
SURNAME	RW King						
DATE	11/16/98	11/18/98					

EPA Form 1320-1A (1/90) Printed on Recycled Paper OFFICIAL FILE COPY

[NEW FRONT LABEL (EPA # 68563-2)]

**SQUIRREL FREE INC**  
Seed Saver

A concentrate for treating bird feed to discourage feeding by tree squirrels.  
Contains all food grade ingredients.

**ACTIVE INGREDIENTS**

Capsaicin and Related  
Capsaicinoids\*.....1.08%

**INERT**  
**INGREDIENTS**.....98.92%

**TOTAL**.....100%

\*Made from Ground Hot Peppers

**KEEP OUT OF REACH OF CHILDREN**

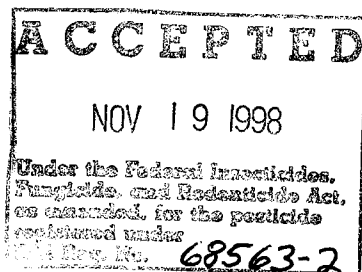
**CAUTION:** Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.

**FIRST AID**

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

See back label for additional statements.



1576 Sweet Home Road • Amherst • New York • 14228  
716-636-5107 • 716-636-3630

# Snyder Seed Corporation

[NEW BACK LABEL (EPA # 68563-2)]

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not contaminate water when disposing of equipment washwater or rinsate.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 120 parts (by weight) of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 22.5 pounds of feed. Use a container that can be completely sealed and is large enough to facilitate mixing of this product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete mixing.

**Use Restrictions:** This product may be used to discourage feeding by gray, red, and fox squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling the product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**Application Directions:** Fill feeders with feed treated with product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return.

### STORAGE & DISPOSAL

**STORAGE:** Store Product and treated feed in secure container, in a dry place inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Wrap container and discard in trash.

Manufactured for:  
SQUIRREL FREE INC.  
A Subsidiary of Snyder Seed Corporation  
1576 Sweet Home Road  
West Amherst, NY 14228

EPA Reg. No.: 68563-2      EPA Est. No.: 30120-OH-1  
NET WEIGHT 3 oz.

1576 Sweet Home Road • Amherst • New York • 14228  
716-636-5107 • 716-636-3630

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# Snyder Seed Corporation

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1576 Sweet Home Road  
Amherst, New York 14228  
Phone: (716) 636-5107  
Fax: (716) 636-3630

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## *Fax Transmittal Sheet*

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To: Richard King  
Federal Environmental Protection Agency

Fax Number: 1-703-308-7026

Total Pages Faxed: 9

From: William D. Schregel

Date: 10/29/98

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Dear Richard,

We are currently trying to re-register three of our products in Florida:

- 1) Pepper-Treat Wild Birdseed (68563-1) - according to our label stamped January 22, 1998.
- 2) Suet with Pepper-Treat (68563-3) - according to our label stamped February 11, 1998.
- 3) Seed Saver (68563-2) - according to our label stamped **May 20, 1997**.

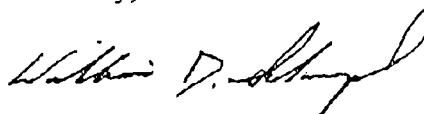
Please note that the Seed Saver label being used is dated several months before the others. You may recall that we submitted label changes/amendments for the above products on Dec. 31, 1997. We received new stamped labels for the birdseed and suet shortly after the submittal. Just previous to receiving these labels, we received a letter from J. Wrice (dated 1/16/98) informing us that our application for an amendment to our Seed Saver label was complete and qualified for fast track review. The amendment we requested regarding the Seed Saver required an efficacy study, and you explained that we should expect this registration to take more time than the others. We have not yet received a stamped label for this product. Consequently, we are registering the product in each state as we did previous to the amendment requests.

All three of our products were registered in Florida last year. This year they noticed an error. The stamp on the Seed Saver label (May 20, 1997) has a place for the EPA product number to be written in. Our Seed Saver (EPA# 68563-2) label has mistakenly been given the number for the Birdseed (EPA# 68563-1). Florida will not allow us to register that product until this is corrected.

I have sent with this fax a copy of the label without the stamp so that it can be re-stamped if you feel this is the best way to proceed. I have also sent a copy of the amended label for which we requested approval on Dec. 31, 1997. We would prefer to have the latter label approved. We never received any information rejecting our proposed changes, so I am assuming that these amendments are still being processed. If you feel we are still some time away from getting the amended label approved, we are going to need a re-stamp of our May 20, 1997 label in order to resume registration in Florida.

If you require any other information, or if you have suggestions that will help expedite the process, please call me at 716-636-5107. Thank you for your help.

Sincerely,



William D. Schregel  
Quality Assurance Manager



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC  
ANIMALS**

**Caution.** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 40 parts (by weight) of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 7.5 pounds of feed. Use a container that can be completely sealed and is large enough to facilitate mixing of this product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete. **Application Directions:** Fill feeders with feed treated with product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return.

**Use Restrictions:** This product may be used to discourage feeding by squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling this product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**STORAGE & DISPOSAL**

**STORAGE:** Store product and treated feed in secure container, in a dry place inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Wrap container and discard in trash.

**Squirrel Free Inc.'s Seed Saver**

A concentrate for treating bird feed to discourage feeding by squirrels.  
Contains all natural ingredients.

**ACTIVE INGREDIENTS**

Capsaicin and Related Capsaicinoids\* ..... 1.08%

**INERT INGREDIENTS** ..... 98.92%

**TOTAL** ..... 100%

\* Made from Ground Hot Peppers

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION:** Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.

**FIRST AID**

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

See left panel for additional statements.

Manufactured for:

**Squirrel Free Inc.**

A Subsidiary of Snyder Seed Corporation

1576 Sweet Home Road

West Amherst, NY 14228

EPA File Symbol: 68563-E EPA Est. No.:

NET WEIGHT 3 oz.

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC  
ANIMALS**

**Caution.** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 40 parts (by weight) of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 7.5 pounds of feed. Use a container that can be completely sealed and is large enough to facilitate mixing of this product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete. **Application Directions:** Fill feeders with feed treated with product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return.

**Use Restrictions:** This product may be used to discourage feeding by squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling this product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**STORAGE & DISPOSAL**

**STORAGE:** Store product and treated feed in secure container, in a dry place inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Wrap container and discard in trash.

**Squirrel Free Inc.'s Seed Saver**

A concentrate for treating bird feed to discourage feeding by squirrels.  
Contains all natural ingredients.

**ACTIVE INGREDIENTS**

Capsaicin and Related Capsaicinoids\* ..... 1.08%

**INERT INGREDIENTS** ..... 98.92%

**TOTAL** ..... 100%

\* Made from Ground Hot Peppers

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION:** Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.

**FIRST AID**

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

See left panel for additional statements.

Manufactured for:

**Squirrel Free Inc.**

A Subsidiary of Snyder Seed Corporation  
1576 Sweet Home Road  
West Amherst, NY 14228

EPA File Symbol: 68563-E      EPA Est. No.:  
NET WEIGHT 3 oz.

MAY 20 1997  
Under the Federal Insecticide, Fungicide, and Rodenticide Act  
68563-1

[NEW FRONT LABEL (EPA # 68563-2)]

**SQUIRREL FREE INC**  
**Seed Saver**

A concentrate for treating bird feed to discourage feeding by tree squirrels.  
Contains all food grade ingredients.

**ACTIVE INGREDIENTS**

Capsaicin and Related  
Capsaicinoids\* ..... 1.08%

**INERT**  
**INGREDIENTS** ..... 98.92%

**TOTAL** ..... 100%

\*Made from Ground Hot Peppers

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION:** Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.

**FIRST AID**

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

See back label for additional statements.

1576 Sweet Home Road • Amherst • New York • 14228  
716-636-5107 • 716-636-3630

# Snyder Seed Corporation

[NEW BACK LABEL (EPA # 68563-2)]

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not contaminate water when disposing of equipment washwater or rinsate.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 120 parts (by weight) of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 22.5 pounds of feed. Use a container that can be completely sealed and is large enough to facilitate mixing of this product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete mixing.

**Use Restrictions:** This product may be used to discourage feeding by gray, red, and fox squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling the product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**Application Directions:** Fill feeders with feed treated with product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return.

### STORAGE & DISPOSAL

**STORAGE:** Store Product and treated feed in secure container, in a dry place inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Wrap container and discard in trash.

Manufactured for:  
SQUIRREL FREE INC.  
A Subsidiary of Snyder Seed Corporation  
1576 Sweet Home Road  
West Amherst, NY 14228

EPA Reg. No.: 68563-2      EPA Est. No.: 30120-OH-1  
NET WEIGHT 3 oz.

1576 Sweet Home Road • Amherst • New York • 14228  
716-636-5107 • 716-636-3630

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not contaminate water when disposing of equipment washwater or rinsate.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 40 parts (by weight) of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 7.5 pounds of feed. Use a container that can be completely sealed and is large enough to facilitate mixing of this product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete.

**Use Restrictions:** This product may be used to discourage feeding by gray, red, and fox squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling this product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**Application Directions:** Fill feeders with feed treated with product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return.

### STORAGE & DISPOSAL

**STORAGE:** Store product and treated feed in secure container, in a dry place inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Wrap container and discard in trash.

## Squirrel Free Inc.'s Seed Saver

A concentrate for treating bird feed to discourage feeding by tree squirrels.

Contains all food grade ingredients.  
**NOT REVIEWED**  
**In Accordance with PR Notice 82 2**  
**Based On Draft Labeling Dated**  
5/20/97

### ACTIVE INGREDIENTS

Capsaicin and Related Capsaicinoids\* ..... 1.08%

INERT INGREDIENTS ..... 98.92%

TOTAL ..... 100%

\* Made from Ground Hot Peppers

### KEEP OUT OF REACH OF CHILDREN

**CAUTION:** Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.

### FIRST AID

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

See left panel for additional statements.

Manufactured for:

### Squirrel Free Inc.

A Subsidiary of Snyder Seed Corporation  
1576 Sweet Home Road  
West Amherst, NY 14228

EPA File Symbol: 68563-2      EPA Est. No.: 68563-NY-001  
NET WEIGHT 3 oz.

*Snyder Seed Corp./Squirrel Free Inc.*

June 30, 1997


Mr. Dan Peacock (H7504C)  
U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Registration Division - Team 14  
401 M Street, SW  
Washington, DC 20460

Reference: Pepper Treat™ Wild Bird Seed (EPA Reg. No. 68563-1)  
Seed Saver (EPA Reg. No. 68563-2)  
Suet with Pepper Treat™ (EPA Reg. No. 68563-3)  
Final Labels

Dear Dan:

Attached are five copies of the final labels for the above referenced end-use products. Please call either Cathy Shea at 703-847-7407 or me at 716-636-5107 if you have any questions or if we can be of further assistance.

Sincerely,

  
for Joseph A. Dunn, Ph.D.  
President

US ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF PESTICIDES PROGRAMS  
REGISTRATION DIVISION (TS-767)  
WASHINGTON, DC 20460

EPA REGISTRATION NO.

68563-2

DATE OF ISSUANCE

MAY 20 1997

TERM OF ISSUANCE

NAME OF PESTICIDE PRODUCT

Seed Saver

NOTICE OF PESTICIDE: ☒ REGISTRATION  
☐ REREGISTRATION

(Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Squirrel Free Inc.  
Subsidiary of Snyder Seed Corp  
1576 Sweet Home Road  
Amherst, NY 14228

Attention: Dr. Joseph A. Dunn

1.66 5-522408  
17

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is registered in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) section 3(c)(5) provided that you:

A. Make the labeling changes listed below and submit one (1) copy of final printed labeling before you release the product for shipment:

1. Add "EPA Reg. No. 68563-2" to your label.
2. On the Front Panel, place "Squirrel Free Inc.'s" above "Seed Saver" and make all characters of the product name the same type size. In this way, the reader will recognize that "Squirrel Free" is your company name and not a label claim.
3. In the claim beneath your product's name, change "squirrels" to "tree squirrels".
4. Change "Contains all natural ingredients", which is prohibited by the Regulations [40 CFR 156.10(a)(5)(x)(A)] to "Contains all food grade ingredients", if this is a true statement.

☒ ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE MAY 20 1997

5. Revise your "PRECAUTIONARY STATEMENTS" as follows:

PRECAUTIONARY STATEMENTS

Environmental Hazards

Do not apply directly to water. Do not contaminate water when disposing of equipment washwater or rinsate.

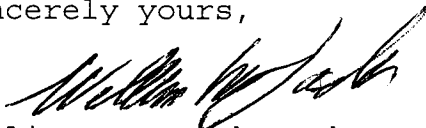
Since your "CAUTION" statement appears on the Front Panel, it need not be repeated here.

6. Move the "Application Directions" so that they follow the "Use Restrictions" subsection of the "DIRECTIONS FOR USE".
7. In the first sentence of your "Use Restrictions", change "squirrels" to "gray, red, and fox squirrels".
- B. You will need to relabel all existing stocks in your possession with the new labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have questions about this registration, please contact Mr. Dan Peacock at 703-305-5407. A stamped copy of the labeling is enclosed for your records.

Sincerely yours,



William W. Jacobs, PhD  
Product Manager (14)  
Insecticide-Rodenticide Branch  
Registration Division (H7504C)

Enclosures: 1. Stamped Label  
2. A-79 Enclosure

Peacock WP#12:A:\Capsaici\68563-2.NOT:305-5407,-6600:5/20/97



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC  
ANIMALS**

**Caution.** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 40 parts (by weight) of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 7.5 pounds of feed. Use a container that can be completely sealed and is large enough to facilitate mixing of this product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete. **Application Directions:** Fill feeders with feed treated with product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return.

**Use Restrictions:** This product may be used to discourage feeding by squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling this product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**STORAGE & DISPOSAL**

**STORAGE:** Store product and treated feed in secure container, in a dry place inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Wrap container and discard in trash.

**Squirrel Free Inc.'s Seed Saver**

A concentrate for treating bird feed to discourage feeding by squirrels.  
Contains all natural ingredients.

**ACTIVE INGREDIENTS**

Capsaicin and Related Capsaicinoids\* ..... 1.08%

**INERT INGREDIENTS** ..... 98.92%

**TOTAL** ..... 100%

\* Made from Ground Hot Peppers

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION:** Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.

**FIRST AID**

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

See left panel for additional statements.

Manufactured for:

**Squirrel Free Inc.**

A Subsidiary of Snyder Seed Corporation

1576 Sweet Home Road

West Amherst, NY 14228

EPA File Symbol: 68563-E EPA Est. No.:

NET WEIGHT 3 oz.

RECEIVED  
with COMMENTS  
to EPA Letter Dated  
MAY 20 1997  
68563-2

08502-12

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC  
ANIMALS**

**Caution.** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

*Emu. 1/1/13*

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 40 parts (by weight) of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 7.5 pounds of feed. Use a container that can be completely sealed and is large enough to facilitate mixing of this product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete. **Application Directions:** Fill feeders with feed treated with product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return. *(Says, red, and for)*

**Use Restrictions:** This product may be used to discourage feeding by *free* squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling this product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**STORAGE & DISPOSAL**

**STORAGE:** Store product and treated feed in secure container in a dry place inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Wrap container and discard in trash.

*same type size*  
**Squirrel Free Inc.'s Seed Saver**

A concentrate for treating bird feed to discourage feeding by *tree* squirrels.

*food grade materials*  
\*\* Contains all natural ingredients.

**ACTIVE INGREDIENTS**

Capsaicin and Related Capsaicinoids\* ..... 1.08%

INERT INGREDIENTS ..... 98.92%

TOTAL

100%

\* Made from Ground Hot Peppers

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION:** Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.

**FIRST AID**

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

See left panel for additional statements.

Manufactured for:

**Squirrel Free Inc.**

A Subsidiary of Snyder Seed Corporation

1576 Sweet Home Road

West Amherst, NY 14228

EPA File Symbol: 68563-E

EPA Est. No.:

NET WEIGHT 3 oz.

*Label  
w/ caution  
DANGER  
DO NOT  
USE*

Susan L.



Fax transmission from the Office of

REPRESENTATIVE

BILL

PAXON

Office

Phone

Fax

☐ 5500 Main St.  
Williamsville, NY 14221

(716) 634-2324 (716) 631-7610

☐ 10 East Main St.  
Victor, NY 14564

(716) 742-1600 (716) 742-1976

☒ 2412 Rayburn HOB  
Washington, DC 20515

(202) 225-5265 (202) 225-5910

TO: Denise, Dr. Goldman's Office 260-1847FROM: Jackie HawksNUMBER OF PAGES (including cover): 2
 COMMENTS: Please see that this is  
delivered ASAP.  
Hard Copy to follow.

NOTE: Please call the transmitting office if any portion of this fax is missing or illegible.

TOLL FREE TELEPHONE NUMBER:  
1-(800) 453-6330

**DISTRICT OFFICES:**

5800 MAIN STREET  
WILLIAMSVILLE, NY 14221  
(716) 634-2324  
(716) 631-7810 (FAX)

10 EAST MAIN STREET  
VICTOR, NY 14564  
(716) 742-1800  
(716) 742-1976 (FAX)

**CAPITOL OFFICE:**

2412 RAYBURN  
HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515  
(202) 225-5266  
(202) 225-5910 (FAX)

**INTERNET ADDRESS:**  
rep.paxon@mail.house.gov



**Congress of the United States**  
**House of Representatives**

**BILL PAXON**

27TH DISTRICT, NEW YORK

May 14, 1997

**SATELLITE OFFICES:**  
(BY APPOINTMENT)

420 EAST MAIN STREET  
BATAVIA, NY 14020

A COURT STREET, ROOM 100  
GENESEO, NY 14454

611 WEST WASHINGTON STREET  
GENEVA, NY 14456

10 LEACH ROAD  
LYONS, NY 14489

117 FALL STREET  
SENECA FALLS, NY 13148

36 NORTH MAIN STREET  
WARSAW, NY 14569

The Honorable Lynn R. Goldman  
Assistant Administrator For Prevention, Pesticides and Toxic  
Substances  
Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460

Dear Administrator Goldman:


On January 30, 1997, a meeting was held in my office with James Aidala of EPA, Doug Parsons, Legislative Affairs for EPA, Susan Lewis, Product Manager for EPA, Cathy Shea, consultant for Squirrel Free, and Joseph Dunn of Squirrel Free Inc., the manufacturer and distributor of a line of bird seed which repels rodents.

At this meeting, it was determined that Squirrel Free Inc. would undergo the normal review process for a pesticide application under EPA regulations for the line of bird seed.

It has been three months since that meeting. I am asking that you provide me with a complete update on the status of this application and a timeline for a final determination so that I may relay this information to my constituents.

Thank you for your attention to this matter and I ask that this request be conducted within the rules and regulations of your agency.

Sincerely,



BILL PAXON  
Representative

BP: jh

DATE OUT: 5/13/97

SUBJECT: EP [x] MP [ ] PRODUCT CHEMISTRY REVIEW  
DP BARCODE No.: D235488 REG./File Symbol No.: 68563-E  
PRODUCT NAME: Seed Saver  
COMPANY: Snyder Seed Corp.

TO: PM #14, William Jacobs/Daniel Peacock  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

FROM: Bruce F. Kitchens, Chemist *Bruce F. Kitchens 5/14/97*  
Technical Review Branch  
Registration Division (7505W)

THRU: Sami Malak, Team Leader *Sami Malak 5/14/97*  
Technical Review Branch  
Registration Division (7505W)

**SUMMARY OF FINDINGS:**

The registrant is submitting this package as a resubmission. This resubmission is in response to product chemistry concerns regarding the end use product, Seed Saver. See confidential appendix for detailed discussion. The registrant also submitted additional data to support this registration. The Technical Review Branch has been asked to review this submission.

The Technical Review Branch has reviewed this submission and concludes the following:

- > The CSF dated 3/24/97 is acceptable. This product contains no inert ingredients.
- > Please see confidential appendix for discussion of the product chemistry concerns.

~~CONFIDENTIAL~~ ~~APPENDIX~~

EP ☒ MP ☐ PRODUCT CHEMISTRY REVIEW

BARCODE No.: D235488 REG./File Symbol No.: 68563-E  
PRODUCT NAME: Seed Saver  
Reviewer: B.Kitchens Company: Snyder Seed Corporation

- > The Product Chemistry Section (now the Technical Review Branch) expressed the concern that the percentage of active ingredients are identical in ground capsicum (MRID 441467-07) and treated seeds in Seed Saver (EPA File Symbol 68563-E, MRID 441466-03) in spite of the fact that Seed Saver does not contain oleoresin of capsicum. The registrant submitted the following response:

"The percent of actives are identical in ground capsicum/cayenne (the preliminary analysis is located in MRID 441467-07) and Seed Saver (the preliminary analysis is located in MRID 441466-03) because Seed Saver only contains capsicum/cayenne.

The Technical Review Branch finds the registrant's response acceptable.

DP BARCODE: D235488

CASE: 060982  
SUBMISSION: S522408

DATA PACKAGE RECORD  
BEAN SHEET

DATE: 04/24/97  
Page 1 of 1

\* \* \* CASE/SUBMISSION INFORMATION \* \* \*

CASE TYPE: REGISTRATION ACTION: 166 RESB NEW PRO-OC-MIN CHG  
RANKING : 10 POINTS ()  
CHEMICALS: 070701 Capsaicin (in oleoresin of capsicum) 1.1000%

ID#: 068563-E SEED SAVER  
COMPANY: 068563 SNYDER SEED CORP  
PRODUCT MANAGER: 14 WILLIAM JACOBS 703-305-6406 ROOM: CM2 259  
PM TEAM REVIEWER: DANIEL PEACOCK 703-305-5407 ROOM: CM2 221  
RECEIVED DATE: 03/27/97 DUE OUT DATE: 10/03/97

\* \* \* DATA PACKAGE INFORMATION \* \* \*

DP BARCODE: 235488 EXPEDITE: Y DATE SENT: 04/24/97 DATE RET.: / /  
CHEMICAL: 070701 Capsaicin (in oleoresin of capsicum)  
DP TYPE: 001 Submission Related Data Package  
CSF: Y LABEL: Y

ASSIGNED TO	DATE	IN	DATE	OUT	ADMIN DUE DATE: 09/21/97
DIV : RD	/	/	/	/	NEGOT DATE: / /
BRAN: RSB	/	/	/	/	PROJ DATE: / /
SECT: PCRS	/	/	/	/	
REVR :	/	/	/	/	
CONTR:	/	/	/	/	

\* \* \* DATA REVIEW INSTRUCTIONS \* \* \*

Chemistry,

please review

1. co ltr 3/24
2. csf
- 3, spec sheet
- 4.label
5. our 2/14/97 ltr

Dan Thanks

\* \* \* DATA PACKAGE EVALUATION \* \* \*

No evaluation is written for this data package

\* \* \* ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION \* \* \*

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
-------	----------------	----------	----------	-----	-----	-------



United States  
Environmental Protection Agency  
Washington, DC 20460

Form Approved  
OMB No. 2070-0060  
Approval Expires 05-31-95

Certification with Respect to Citation of Data

Applicants Name and Address

Squirrel Free Inc.

A Sub. of Snyder Seed Corporation

1576 Sweet Home Road

West Amherst, NY 14228

EPA File Symbol/Registration Number

68563-E

Product Name

Seed Saver

Date of Application

3-24-97

**NOTE:** If your product is a 100% repackaging of another EPA-registered product that you purchase, and is labeled for the same uses, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

1. This application is supported by all data submitted or cited in the application. In addition, if cite-all options are indicated, this application is supported by all data in the Agency's files that concern the properties or effects of this product that is identical or substantially similar and that is one of the types of data that would be required to be submitted if this application sought the initial registration of a product of identical or similar composition and intended uses under the data requirements in effect on the date of approval of this application. (Check the appropriate boxes, in items 2 and 3, or 4 below that pertain to your application.)

2. I certify that, for each study cited in support of this application for registration that is an exclusive use study.

☐ I am the original submitter\*; or

☐ I have obtained the written permission of the original submitter for \_\_\_\_\_, which is  
(insert name of chemical)  
\_\_\_\_\_ (for multiple chemicals link the companies who are original data submitters  
(insert names of companies)  
with the appropriate chemical name) to cite that study\*

3. I certify that, for each study cited in support of this application for registration that is not an exclusive use study;

a. ☒ I am the original data submitter\*; or

☐ I have obtained the written permission of the original data submitter for \_\_\_\_\_, which is  
(insert name of chemical)  
\_\_\_\_\_ (for multiple chemicals link the companies who are original data submitters  
(insert names of companies)  
with the appropriate chemical name) to cite that study\*; or

b. ☐ I have notified in writing the companies \_\_\_\_\_ for \_\_\_\_\_ that  
(insert names of companies) (insert name of chemical)

have submitted data I have cited to support this application and have offered to: (a) Pay compensation for those data in accordance with section 3(c)(1)(F) and 3(c)(2)(D) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); and (b) Commence negotiations to determine which data are subject to the compensation requirement of FIFRA and the amount and terms of compensation due, if any. The companies I have notified are:

Companies \_\_\_\_\_ for \_\_\_\_\_ (for multiple  
(insert names of companies) (insert name of chemical)  
chemicals link the companies who are original data submitters with the appropriate chemical name)  
listed on the Pesticide Data Submitters List for all active ingredients contained in my product (cite-all method or cite-all option under Selective Method\*). (Also, sign the General Offer Statement below.)  
Companies \_\_\_\_\_ for \_\_\_\_\_ (for multiple  
(insert names of companies) (insert name of chemical)  
chemicals link the companies who are original data submitters with the appropriate chemical name)  
that have submitted the studies which I have cited (Selective method\*).

4. ☒ I certify that for each study cited in support of this application I am not required to offer data compensation or obtain written permission because all time periods for exclusive use and data compensation have expired.

\* A Data Matrix identifying these studies is attached. (Note: a Data Matrix is not required under the cite-all method)

Signature

Name and Title Joseph A. Dunn, Ph.D., President

Date

3/24/97

General Offer to Pay: I hereby offer and agree to pay compensation to other persons, with regard to the approval of this application, to the extent required.

Signature

Name and Title

Date



#### Paperwork Reduction Act Notice

The public reporting burden for this collection of information is estimated to average 2.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining needed data, and completing and reviewing this application form. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 401 M Street, S. W., Washington, DC 20460; and to Office of Management and Budget, Paperwork Reduction Project (2070-0055), Washington, DC 20503, marked "Attention Desk Officer for EPA."

5-522400

Snyder Seed Corp./Squirrel Free Inc.

On Same date (3-25-97)  
we also received  
submission for  
5-6563-R & -G.  
There also contained  
chemistry data,  
which I sent for  
format review  
3/31/97

March 24, 1997

Mr. Dan Peacock (H7504C)  
U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Registration Division - Team 14  
401 M Street, SW  
Washington, DC 20460

Reference: Seed Saver (EPA File Symbol 68563-E)  
Response to letter dated February 14, 1997

Dear Dan:

Thank you for your February 14, 1997 letter which outlines required changes and points of clarification for the registration of Seed Saver (EPA File Symbol 68563-E) as a pesticide. I have listed below, in the same format as your letter, our responses to your comments and the changes we have made.

I. Forms

- ✓ A. Application - Product Size  
*At this time, Squirrel Free Inc., only plans on selling Seed Saver in 3 ounce packages.*
- ✓ B. Certification  
*The revised form is attached.*
- ✓ C. Confidential Statement of Formula (CSF)  
*The revised CSF is attached.*

II. Data

A. Chemistry

Percentage of active ingredients are identical in ground capsicum (MRID 441467-07) and treated seeds in Seed Saver (EPA File Symbol 68563-E, MRID 441466-03) in spite of the fact that Seed Saver does not contain oleoresin of capsicum. Please explain.  
*The percent of actives are identical in ground capsicum/cayenne (the preliminary analysis is located in MRID 441467-07) and Seed Saver (the preliminary analysis is located in MRID 441466-03) because Seed Saver only contains ground capsicum/cayenne.*

Submit a specification sheet to each source product.  
*The specification sheet is attached.*

## B. Acute Toxicity

*No concerns to be addressed.*

## C. Effectiveness

It is not clear from the information provided that this formulation was used in any of the tests discussed in the two reports. Please explain.

*Fitzgerald et al used Seed Saver as the sole source of capsicum and related capsaicinoids in their concentration/response efficacy trials with gray striped sunflower seeds and sunflower hearts. Specifically, these efficacy trails, using free ranging squirrels, combined either 4.89% Seed Saver (8250 SHU), 16.33% Seed Saver (27,500 SHU) and 48.99% Seed Saver (82,500 SHU) with treated gray stripped sunflower seeds and sunflower hearts. The study found that treated sunflower hearts were more effective at repelling squirrels than treated whole sunflower seeds. This can be attributed to the fact that squirrels used their claws and teeth to peel away the treated shells of the whole sunflowers seeds.*

*In the Curtis et al (MRID 441467-10) study, all of the wild bird seed used was Pepper Treat™ Wild Bird Seed consisting of █████ millet, █████ cracked corn, █████ sunflower hearts, █████ black oil sunflower, 2.7% oleoresin of capsicum, and 1.9% Seed Saver (ground capsicum/ cayenne). In this study, the source, concentration, and percentage of each active capsaicinoid is listed in the following table.*

*Source, Concentration, and Percent of Active Capsaicinoids in  
Pepper Treat™ Wild Bird Seed*

	Seed Saver (Ground Capsicum/Cayenne)		Oleoresin of Capsicum		Total	
	µg/gm	Percent*	µg/gm	Percent*	µg/gm	Percent*
Capsaicin	114	0.0114	17.7	0.00177	131	0.0131
Dihydrocapsaicin	76	0.0076	12.8	0.00128	88.8	0.0089
Nordihydrocapsaicin	15.4	0.00154	2.4	0.00024	17.9	0.0018
Total - Capsaicin and Related Capsaicinoids	205.4	0.02054	32.9	0.00329	238.2	0.0238
* Percent was calculated as the number of µg active divided by 1,000,000 µg/gm X 100						

*From this table, it can be determined that 86.2% of the capsaicin and related capsaicinoids are from Seed Saver (Ground Capsicum/Cayenne) and 13.8% capsaicin and related capsaicinoids are from Oleoresin of Capsicum.*

## III. Labeling

*See the attached label.*

Please call either Cathy Shea at 703-847-7407 or me at 716-636-5107 if you have any questions or if we can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph A. Dunn". The signature is fluid and cursive, with the first name "Joseph" being more prominent.

Joseph A. Dunn, Ph.D.  
President



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

166 5515 656  
13

February 14, 1997

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Snyder Seed Crop  
1576 Sweet Home Road  
Amherst, NY 14228

Attention: Dr. Joseph A. Dunn

Subject: Seed Saver

EPA File Symbol 68563-E

Your submissions of October 24 and December 10, 1996

We have completed our review of this product and have the following comments:

I. Forms

A. Application

Do you plan to sell this product in any sizes other than that indicated on Block 4 of Section III? If so, you need to amend your form to indicate all product sizes.

B. Certification

Since Capsaicin is not an "exclusive use" active, you need to resubmit your form, deleting Block 2a.

C. Confidential Statement of Formula (CSF)

See our comments under the review of the chemistry data below.

II. Data

✓ A. Chemistry

An adequate enforcement analytical method was included with this submission. The method entitled: "Separation and Quantitation of Red Pepper Major Heat Principles by Reverse Phase High-Pressure Liquid Chromatography", was authored by Patrick G. Hoffman, Mary C. Lego, and William G. Galeto, J. Agric. Food Chem. 1983, 31, 1326-1330. Sample chromatograms were included with the method.

Product chemistry data requirements for Seed Saver, Reg. File Symbol 68563-E, are adequate. However, you need to clarify the following points below:

Please explain why the percentages of the active ingredients, Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin are identical in ground capsicum (MRID #441467-07) and treated seeds in seed saver, Reg. No. 68563-E (MRID #441466-03) in spite of the fact the latter formulation (seed saver) does not contain oleoresins of capsicum, a second source of these active ingredients.

Submit a specification sheet for each source product, including the 1) % Capsaicin and Related Capsaicinoids and 2) the purpose of the product.

#### B. Acute Toxicity

We found the four studies (MRID Nos. 441891-01, 441891-02, 441467-08, and 441467-09) acceptable. See below for proper labeling text.

#### C. Effectiveness

1. Data included in the efficacy reports by Fitzgerald, et al (1995), and Curtis, et al (1996, MRID# 441467-10) indicate that it is possible to discourage feeding by gray squirrels on feeds of the types used at bird feeders by treating all or part such feeds with capsaicinoids. It is not clear from the information provided that the specific formulation proposed for 68563-E was used in the preparation of any of the test materials discussed in these two reports.

### III. Labeling

Submit three (3) copies of revised labeling with the following changes. Following your next submission, additional changes may be needed.

1. Clarify your company and product name.
2. The claim "Squirrel Free" is over promising and unacceptable.

3. Revise your ingredient statement as follows:

Active Ingredients

Capsaicin and Related Capsaicinoids\*

Inert Ingredients

\*Made from Ground Hot Peppers

4. The label bears no specific claims of sites and pests. The closest that label comes to making a pest claim is the promotional statement "Keeps birdseed SQUIRREL FREE™". That statement is a false and misleading claim of absolute efficacy which common experience and the data that you have submitted refute. There was some feeding by squirrels on virtually all formulations tested. We do not believe that the trademark designation adequately softens this claim as SQUIRREL FREE™ is being used apart from the proposed name for this product. The "™" does not, in our judgment, adequately indicate that the expression "SQUIRREL FREE™" is merely a trade name. A claim appropriate for what users might be able to expect from this product would be

"A concentrate for treating bird feed to discourage feeding by gray squirrels."

5. The proposed "**DIRECTIONS FOR USE**" do a poor job of indicating how to treat bird feeds with the product and fail to indicate what the product is supposed to do, where the product may be used, and exactly how the product should be used. These "directions" also fail to inform users of any special restrictions, limitations, or personal protection needed when mixing or applying this product. As this product is proposed to be pure ground capsicum, there are likely to be significant amounts of airborne capsicum particles when bird feed is being treated with this product and when the finished mixes are being applied. This product should not be mixed indoors or by anyone in a downwind position. As bird feeders are often situated at eye level or above, there also are potentials for ocular and mucosal exposures to people who apply mixtures made from this product. If these people are pouring the contents of containers directly into feeders, the amount of airborne dust encountered could be very significant, particularly as your mixing directions do not call for use of any sticking agent.

The text indicated below would be a great improvement over that which you have proposed.

### "DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**Use Restrictions:** This product may be used to discourage feeding by gray squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where bird feed is placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling this product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 40 parts, by weight, of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 7.5 pounds of feed. [INDICATE HOW MIXING IS TO BE ACHIEVED, AS IN THIS EXAMPLE: Use a container that can be completely sealed and is large enough to facilitate mixing of the product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete mixing.]

**Application Directions:** Fill feeders with feed treated with this product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return."

[Note that the text in brackets [] indicates where you are expected to supply the missing information.]

6. Revise the "CAUTION" portion of your "PRECAUTIONARY STATEMENTS" as follows:

CAUTION: Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.



7. Add the following "First Aid" statement:

IF IN EYES: Flush with plenty of water. Call a physician if irritation persists.

IF ON SKIN: Wash with plenty of soap and water.

8. Revise your "STORAGE AND DISPOSAL" statements as follows:

STORAGE AND DISPOSAL

Storage: Store product and treated feed in secure container, in a dry place inaccessible to children and pets.

Disposal: Do not reuse empty container. Wrap in newspaper and discard in trash.

After your next submission, we may have additional labeling changes or additions.

If you have questions about this letter, please contact Mr. Dan Peacock at 703-305-5407.

Sincerely yours,



William W. Jacobs, PhD  
Product Manager (14)  
Insecticide-Rodenticide Branch  
Registration Division (H7504C)

Peacock WP#11:A:\Capsaici\68563-E.FEB:305-5407,-6600:2/14/97

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND  
DOMESTIC ANIMALS**

**Caution.** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**DIRECTIONS:** Mix 1 part product with 40 parts bird seed. Set out and let the birds enjoy.

**STORAGE & DISPOSAL**

**STORAGE:** Store in original container in a dry place inaccessible to children, pets, and domestic animals. **DISPOSAL:** Do not reuse empty container. Wrap container and put out for trash or recycling collection.

**Seed Saver**

Keeps birdseed SQUIRREL FREE™  
Contains all natural ingredients

**ACTIVE INGREDIENTS**

Capsaicin ..... 0.5987%  
Dihydrocapsaicin ..... 0.4004%  
Nordihydrocapsaicin ..... 0.0812%

**INERT INGREDIENTS** ..... 98.9197%

**TOTAL** ..... 100%

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See left panel for additional statements.

Manufactured by:

Snyder Seed Corporation  
1576 Sweet Home Road  
West Amherst, NY 14228

EPA File Symbol: 68563-G  
EPA Est. No.: 68563-OH-001

NET WEIGHT: 3 oz.

REC'D  
OCT 24 P 2:26

DP BARCODE: D232609

DAN Allen

CASE: 061090  
SUBMISSION: S515657

DATA PACKAGE RECORD  
BEAN SHEET

DATE: 01/15/97  
Page 1 of 1

\* \* \* CASE/SUBMISSION INFORMATION \* \* \*

CASE TYPE: REGISTRATION ACTION: 166 RESB NEW PRO-OC-MIN CHG  
RANKING : 0 POINTS ()  
CHEMICALS: 070701 Capsaicin (in oleoresin of capsicum) 0.0873%

ID#: 068563-G SUET WITH PEPPER TREAT  
COMPANY: 068563 SNYDER SEED CORP  
PRODUCT MANAGER: 14 WILLIAM JACOBS 703-305-6406 ROOM: CM2 259  
PM TEAM REVIEWER: DANIEL PEACOCK 703-305-5407 ROOM: CM2 221  
RECEIVED DATE: 12/10/96 DUE OUT DATE: 06/18/97

\* \* \* DATA PACKAGE INFORMATION \* \* \*

DP BARCODE: 232609 EXPEDITE: N DATE SENT: 01/15/97 DATE RET.: / /  
CHEMICAL: 070701 Capsaicin (in oleoresin of capsicum)  
P TYPE: 001 Submission Related Data Package

CSF: Y LABEL: Y  
ASSIGNED TO DATE IN DATE OUT ADMIN DUE DATE: 06/14/97  
DIV : RD / / / / NEGOT DATE: / /  
BRAN: RSB / / / / PROJ DATE: / /  
SECT: PCRS / / / /  
REVR : / / / /  
CONTR: / / / /

\* \* \* DATA REVIEW INSTRUCTIONS \* \* \*

Sami,

Please review the product chemistry data for this 3rd of 3 products.

Thanks,

Dan, 305-5407

\* \* \* DATA PACKAGE EVALUATION \* \* \*

No evaluation is written for this data package

\* \* \* ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION \* \* \*

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
232608	IRB/PMT-14	01/15/97	06/14/97	Y	Y	Y

DATE OUT: FEB 03 1997

SUBJECT: EP [X] MP [ ] TECHNICAL [ ] PRODUCT CHEMISTRY REVIEW  
DP BARCODE No.: 232602 REG./File Symbol No.: 68563-E  
PRODUCT: Seed Saver Rereg. Case No. 4018  
COMPANY: 068563 Snyder Seed Corp RECEIVED DATE: 12/10/96

TO: 14 William Jacobs/Daniel Peacock  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

FROM: Sami Malak, Chemist, 02/03/97 (308-8392) *Sami Malak*  
Product Chemistry Review Section  
Registration Support Branch/RD (7505W)

THRU: Harold Podall, Section Head *HP*  
Product Chemistry Review Section *2/3/97*

**INTRODUCTION:**

With this resubmission, the applicant, Snyder Seed Corp, included product chemistry data, a label EPA received 12/10/96 and CSF, a basic formulation dated 10/18/96, requesting reregistration of this end-use product, Seed Saver, Reg. No. 68563-E

**FINDINGS:**

1. A Reregistration Eligibility Document (RED) for Capsaicin, Rereg. Case #4018, was published during September, 1992. No generic data gaps were cited in the RED.
2. In a publication by Todd P. H.; Bensinger, M. G.; and Biftu, T. (1977): J. Food Sci. 42, 660, six major biologically active capsaicinoids were identified in capsicums (Cayenne pepper) which are: capsaicin (N-[(4-hydroxy-3-methoxyphenyl)methyl]-8-methyl-6-nonenamide); Dihydrocapsaicin (N-[(4-hydroxy-3-methoxyphenyl)methyl]-8-methylnonananamide); Norcapsaicin (N-[(4-hydroxy-3-methoxyphenyl)methyl]-7-methyl-5-octaneamide); Nordihydrocapsaicin (N-[(4-hydroxy-3-methoxyphenyl)methyl]-7-methyloctaneamide); Homocapsaicin (N-[(4-hydroxy-3-methoxyphenyl)methyl]-9-methyl-7-deecnamide); and Homodihydrocapsaicin (N-[(4-hydroxy-3-methoxyphenyl)-methyl]-9-methyldecanamide). Additional trace constituents of capsaicinoids were also identified.
3. The results of ten sample analysis by the applicant is summarized below:

3

Actions

MRID No.	Type of Samples analyzed	Percent of Active Ingredient		
		Capsaicin	Dihydro-capsaicin	Nordihydro-capsaicin
441466-03	Seed Saver	0.599	0.4	0.081
441467-07	Ground Capsicum	0.599	0.4	0.081

4. The applicant should be asked to explain why the percentages of the active ingredients, Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin are identical in ground capsicum (MRID #441467-07) and treated seeds in seed saver, Reg. No. 68563-E (MRID #441466-03) in spite of the fact the latter formulation (seed saver) does not contain oleoresins of capsicum, a second source of these active ingredients.
5. An adequate enforcement analytical method was included with this submission. The method entitled: "Separation and Quantitation of Red Pepper Major Heat Principles by Reverse Phase High-Pressure Liquid Chromatography", was authored by Patrick G. Hoffman, Mary C. Lego, and William G. Galeto, J. Agric. Food Chem. 1983, 31, 1326-1330. Sample chromatograms were included with the method.
6. Product chemistry data requirements for reregistration of this end-use product Pepper Treat Wild Bird Seed, Reg. No. 68563-R, is adequate.
7. Because of the occurrence of at least six major and several trace constituents of capsaicinoids in capsicums (published literature), it is our assessment that the label ingredient statement for this product should be revised to reflect; Active ingredients: Capsaicin and related compounds at (cite total value 1.8%) and inerts at 98.2%; and (2) use directions should be more explicit in explaining what is it to "Set Out", e.g. "ready to use bird seeds intended to repel squirrels."
8. The submitted CSF, a basic formulation dated 10/18/96 for this product is unacceptable: is the source product registered? if so indicate the Reg. No. in Column 12 for Ground capsicum and Oleoresins of Capsicum; if not, an explanation based on scientific and/or regulatory reasons is needed, e.g. low risk products, GRAS, PR or FR Notice, etc.

#### **RECOMMENDATION:**

After resolving Findings 4, 7 & 8 above, we will have no objections to reregister this end-use product, Seed Saver, Reg. No. 68563-E.

**EP [X] MP [ ] TECHNICAL [ ] PRODUCT CHEMISTRY REVIEW**

1. DP BARCODE No. 232602 : 2. REG./File Symbol No.: 68563-E
3. Registration [ ] Reregistration [X], Rereg Case No. 4018
5. Product Name: Seed Saver
6. Pesticide Type: a. Fungicide [ ] b. Herbicide [ ]  
 c. Insecticide [ ] d. Rodenticide [X] e. Antimicrobial [ ]  
 f. Plant Growth Regulator [ ] g. Others: \_\_\_\_\_
7. Uses: a. Food [ ] b. Non food use [X]
8. Type of Submission: New [ ] Resubmission [X] Amendment [ ]  
 "ME-TOO" [ ] Alternate Formulation [ ] Repack [ ]  
 Experimental Use Permit [ ] Other (Specify) \_\_\_\_\_
9. If "Me-TOO" Registration, this product is [ ] is not [ ]  
 similar or substantially similar to EPA's Reg. No.: \_\_\_\_\_
- If not, comment in Confidential Appendix A on the differences  
 between the registered and the new source where significant.
10. Information to be reviewed:
- a. CSF [X]: Basic [X] Alternate [ ]  
 b. Label [X] c. Product Chemistry [X]

**CONFIDENTIAL STATEMENT OF FORMULA, DATED 10/18/96:**

11. Type of formulation and the sources of active ingredients:
- a. Non-integrated formulation system.....[ ]
- b. Are all technical grade active ingredients used  
 registered? • yes [ ] • no [X]
- c. Integrated formulation system.....[X]
12. Basic Properties:
- a. Physical state at ambient temperature: Solid
- b. Density (or bulk density for solids)/temperature: NA
- c. pH of product: NA
- d. Flash point (or flame extension for aerosols): NA
13. Composition: The nominal concentrations (NC) of the

active ingredients and the upper and lower certified limits (UCL & LCL) are as follows:

Active ingredient(s)	% by weight		
	NC	UCL	LCL
Capsaicin.....	0.5987	0.6586	0.5388
Dihydrocapsaicin.....	0.4004	0.4404	0.3904
Nordihydrocapsaicin.....	0.0812	0.0893	0.0731

14. The calculated NCs, based on the pure active ingredients (PAI), are identical to those on the label:  
 • yes ☒ [X] • no ☐ [ ]
15. The certified limits are within the standard limits as per 40CFR§158.175 or are adequately explained if different:  
 • yes ☒ [X] • no ☐ [ ]
16. Clearance of intentionally added ingredients in the formulation for the intended use:
- a. Formulation intended for food use under 40CFR§180.1001:  
 • yes ☐ [ ] • no ☐ [ ] • Some are cleared, others are not ☐ [ ]  
 • Cleared under list: • c ☐ [ ] • d ☐ [ ] • e ☐ [ ]  
 • Are there any limitations for use as an inert under 40CFR§180.1001?  
 • yes ☐ [ ] • no ☐ [ ], If yes, specify: \_\_\_\_\_
- b. Formulation intended for non-food use:  
 • yes ☒ [X] • no ☐ [ ] • Some are cleared, others are not ☐ [ ]
- c. Clearance by the FDA of certain formulations under 21CFR §170 to 199.  
 • yes ☐ [ ] • no ☐ [ ] • Some are cleared, others are not ☐ [ ]  
 If yes, the entire formulation is cleared under 21CFR§\_\_
17. For products produced by an integrated formulation system:
- All impurities of toxicological significance have an UCL:  
 • yes ☐ [ ] • no ☐ [ ] • not applicable ☒ [X]
- All other impurities  $\geq 0.1\%$  associated with the active ingredient in the product are reported at their nominal concentrations:  
 • yes ☐ [ ] • no ☐ [ ] • not applicable ☐ [ ]

**PRODUCT LABEL, EPA RECEIVED 12/10/96:**

18. The active ingredients statement (chemical identities, nominal concentrations) is consistent with the CSF • yes [X] • no [ ]
19. The formulation contains one of the following:
- 10% or more of a petroleum distillate: • yes [ ] •no [X]
  - 1% or more of methyl alcohol: • yes [ ] •no [X]
  - sodium nitrite at any level: • yes [ ] •no [X]
  - a toxic List 1 inert at any level: • yes [ ] •no [X]
  - arsenic in any form: • yes [ ] •no [X]
20. If yes to any of the above, does the inert ingredients statement contains a footnote indicating this?
- yes [ ] • no [ ] • not applicable [ ]
21. The appropriate physical and chemical hazards statement regarding flammability or explosive characteristics of the product are given on the label:
- yes [ ] • no [ ] • not applicable [X]
22. The storage and disposal instructions for the pesticide and container are in compliance with PR Notice 84-1 for household use products or PR Notice 83-3 for all other uses:
- yes [X] • no [ ]

**PRODUCT CHEMISTRY DATA (SERIES 61 and 62)**

<b>23. <u>Chemical IDs/Manufacture/ Analytical Information</u></b>		<b><u>Data Required Fulfilled</u></b>	<b><u>MRID No.</u></b>
61-1	Chemical Identity	Y	441467-01
61-2	Starting Materials & Manufact or Formulation Process	Y	441467-01
61-3	Discussion of Impurities	Y	441467-01, -02
62-1	Preliminary Analysis	Y	441463-03, 441466-03, 441467-06 441467-07 441510-01
62-2	Certified Limits	Y	441130-07
62-3	Enforcement Analytical Method	Y	441467-04 441467-06



**SUMMARY OF PRODUCT CHEMISTRY DATA REQUIREMENTS OF SERIES 63**  
**PHYSICAL/CHEMICAL PROPERTIES, MRID No. 441467-05**

<b><i>GUIDELINE REFERENCE NO/TITLE</i></b>	<b><i>VALUE OR QUALITATIVE DESCRIPTION</i></b>
<i>63-2 Color</i>	<i>Dark brown to Red</i>
<i>63-3 Physical State</i>	<i>Solid</i>
<i>63-4 Odor</i>	<i>Very pungent</i>
<i>63-7 Density, Bulk Density, or Specific Gravity</i>	<i>NA</i>
<i>63-12 pH</i>	<i>NA</i>
<i>63-14 Oxidizing Or Reducing Action</i>	<i>No oxidizing or reducing potential exist.</i>
<i>63-15 Flammability/ Flame Extension</i>	<i>NA</i>
<i>63-16 Explodability</i>	<i>NA</i>
<i>63-17 Storage Stability</i>	<i>Stable for a period of six months.</i>
<i>63-18 Viscosity</i>	<i>NA</i>
<i>63-19 Miscibility (With hydrocarbon Solvents)</i>	<i>NA</i>
<i>63-20 Corrosion Characteristics</i>	<i>Non corrosive to the commercial containers.</i>
<i>63-21 Dielectric Breakdown Voltage</i>	<i>NA</i>



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND  
TOXIC SUBSTANCES

February 6, 1997

MEMORANDUM

Subject: Acute Mammalian Toxicity Review for EPA File Symbols  
68563-R (D232599), 68563-E (D232604) and 68563-G  
(D232610)

From: Mark J. Perry, Biologist  
Precautionary Review Section  
Registration Support Branch  
Registration Division (7505C)

MJP  
2/6/97

To: B. Jacobs, PM-14 / D. Peacock  
Registration Division (7505C)

Applicant: Snyder Seed Corporation  
1576 Sweet Home Rd.  
West Amherst, NY 14228

BACKGROUND

Snyder Seed Corporation submitted two eye and dermal irritation studies as well as acute oral, acute dermal, acute inhalation and dermal sensitization waivers for registration of EPA File Symbols 68563-R, 68563-E and 68563-G. The subject products are squirrel repellents with and without bird feed; capsaicin, dihydrocapsaicin and nordihydrocapsaicin are the active ingredients. The active ingredients in these products are obtained from two different sources, oleoresin of capsicum and ground capsicum. As a result, both source formulations were evaluated separately for eye and skin irritation. The subject studies were performed by Corning Hazelton and have been assigned MRID numbers are 441892-01, 441892-02, 441467-08 and 441467-09.

## RECOMMENDATION

1. Acute Oral; Waiver accepted
2. Acute Dermal; Waiver accepted
3. Acute Inhalation; Waiver accepted
4. Eye Irritation (oleoresin); Category IV / Acceptable
4. Eye Irritation (ground); Category III / Acceptable
5. Dermal Irritation (oleoresin); Category IV / Acceptable
5. Dermal Irritation (ground); Category IV / Acceptable
6. Dermal Sensitization; Waiver accepted

## LABELING

1. The recommended signal word is "caution."
2. The recommended precautionary statements are as follows:

Causes moderate eye irritation. Avoid contact with eyes or clothing.  
Wash thoroughly with soap and water after handling.

3. The recommended first aid statements are as follows:

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

3.

DATA REVIEW FOR ACUTE EYE IRRITATION TESTING (81-4)

Product Manager:14  
MRID No.:441892-01

Reviewer:M. Perry  
Report Date:3/26/96

Testing Laboratory:Corning Hazelton  
Report No.:CHW 60103554  
Author(s): S. Glaza  
Species:Rabbit  
Sex: 6 female  
Weight: 3156-3456 g  
Source: HRP, Inc.

Dosage: 0.1 ml  
Test Material: 1/50 dilution of Oleoresin of Capsicum  
Quality Assurance (40 CFR 160.12):Present

Summary:

1. Toxicity Category: IV
2. Classification: Acceptable

Deviations From 81-4: None

Results: At one hour grade 1 to 2 redness and grade 1 chemosis was reported. At 24 hours only grade 1 redness and grade 1 chemosis were reported. All ocular irritation was clear by 72 hours.

DATA REVIEW FOR ACUTE EYE IRRITATION TESTING (81-4)

Product Manager:14  
MRID No.:441892-02

Reviewer:M. Perry  
Report Date:3/26/96

Testing Laboratory: Corning Hazelton

Report No.:CHW 60103556

Author(s): S. Glaza

Species:Rabbit

Sex: 6 female

Weight: 2928-3398 g

Source: HRP, Inc.

Dosage: 27 mg (0.1 ml weight equiv)

Test Material: Ground Capsicum

Quality Assurance (40 CFR 160.12):Present

Summary:

1. Toxicity Category: III
2. Classification: Acceptable

Deviations From 81-4: None

Results: At 24 and 48 hours most animals exhibited grade 1 chemosis and grade 2 redness. All ocular irritation was clear by 96 hours.

DATA REVIEW FOR SKIN IRRITATION TESTING (81-5)

Product Manager:14  
MRID No.: 441467-08

Reviewer:M. Perry  
Report Date:3/21/96

Testing Laboratory:Corning Hazelton

Report No.:CHW 60103553

Author(s): S. Glaza

Species:Rabbit

Age: --

Sex: 6 male

Weight: 2435-2594 g

Dosage:0.5 ml

Test Material: Oleoresin of capsicum

Quality Assurance (40 CFR 160.12):Present

Summary:

1. The Primary Irritation Index= --
2. Toxicity Category: IV
3. Classification: Acceptable

Deviations From 81-5: None

Results: Although one animal demonstrated grade 2 erythema, most animals exhibited grade 1 erythema and grade 0-1 edema at 72 hours. Irritation was less severe at 96 hours and no irritation was reported by 7 days.

ACUTE TOX ONE-LINER

1. PC CODE: 070701
2. CURRENT DATE: 2/6/97
3. TEST MATERIAL: Capsaicin

Study/Species/Lab/ Study#/Date	MRID No.	Results	Tox. Cat.	Core Grade
81-4, Rabbit, Corning Hazelton, CHW 60103554, 3/26/96	441892-01	No positive scores at 72 hours	IV	A
81-4, Rabbit, Corning Hazelton, CHW 60103556, 3/26/96	441892-02	Clear by 96 hours	III	A
81-5, Rabbit, Corning Hazelton, CHW 60103553, 3/21/96	441467-08	Minimal irritation at 72 hrs.	IV	A
81-5, Rabbit, Corning Hazelton, CHW 60103555, 3/21/96	441467-09	Minimal Irritation at 72 hours.	IV	A

Core Grade Key:

A = Acceptable  
S = Supplementary  
U = Unacceptable

DATA REVIEW FOR SKIN IRRITATION TESTING (81-5)

Product Manager:14  
MRID No.: 441467-09

Reviewer:M. Perry  
Report Date:3/21/96

Testing Laboratory:Corning Hazelton  
Report No.: CHW 60103555  
Author(s): S. Glaza  
Species:Rabbit  
Age: --  
Sex: 6 male  
Weight: 2433-2538 g  
Dosage:0.5 g (moistened w/ 1.5 ml water)  
Test Material: Ground capsicum  
Quality Assurance (40 CFR 160.12):Present

Summary:

1. The Primary Irritation Index= --
2. Toxicity Category: IV
3. Classification: Acceptable

Deviations From 81-5: None

Results: Grade 0 to 2 erythema and edema was present at the 72 hour evaluation. Irritation decreased by 96 hours and was absent by day 7.



ACUTE TOX ONE-LINER

1. PC CODE: 070701
2. CURRENT DATE: 2/6/97
3. TEST MATERIAL: Capsaicin

Study/Species/Lab/ Study#/Date	MRID No.	Results	Tox. Cat.	Core Grade
81-4, Rabbit, Corning Hazelton, CHW 60103554, 3/26/96	441892-01	No positive scores at 72 hours	IV	A
81-4, Rabbit, Corning Hazelton, CHW 60103556, 3/26/96	441892-02	Clear by 96 hours	III	A
81-5, Rabbit, Corning Hazelton, CHW 60103553, 3/21/96	441467-08	Minimal irritation at 72 hrs.	IV	A
81-5, Rabbit, Corning Hazelton, CHW 60103555, 3/21/96	441467-09	Minimal Irritation at 72 hours.	IV	A

Core Grade Key:

A = Acceptable  
S = Supplementary  
U = Unacceptable

DP BARCODE: D232604

CASE: 060982  
SUBMISSION: S515656

DATA PACKAGE RECORD  
BEAN SHEET

DATE: 01/15/97  
Page 1 of 1

\* \* \* CASE/SUBMISSION INFORMATION \* \* \*

CASE TYPE: REGISTRATION ACTION: 166 RESB NEW PRO-OC-MIN CHG  
RANKING : 0 POINTS ()  
CHEMICALS: 070701 Capsaicin (in oleoresin of capsicum) 1.1000%

ID#: 068563-E SEED SAVER  
COMPANY: 068563 SNYDER SEED CORP  
PRODUCT MANAGER: 14 WILLIAM JACOBS 703-305-6406 ROOM: CM2 259  
PM TEAM REVIEWER: DANIEL PEACOCK 703-305-5407 ROOM: CM2 221  
RECEIVED DATE: 12/10/96 DUE OUT DATE: 06/18/97

\* \* \* DATA PACKAGE INFORMATION \* \* \*

DP BARCODE: 232604 EXPEDITE: N DATE SENT: 01/15/97 DATE RET.: / /  
CHEMICAL: 070701 Capsaicin (in oleoresin of capsicum)  
P TYPE: 001 Submission Related Data Package

CSF: Y LABEL: Y

ASSIGNED TO	DATE	IN	DATE	OUT	ADMIN DUE DATE: 06/14/97
DIV : RD	/	/	/	/	NEGOT DATE: / /
BRAN: RSB	/	/	/	/	PROJ. DATE: / /
SECT: PRS	/	/	/	/	
REVR :	/	/	/	/	
CONTR:	/	/	/	/	

\* \* \* DATA REVIEW INSTRUCTIONS \* \* \*

Reviewer,

This is the 2nd of 3 product from Synder Seed. Please review the 4 acute tox tests.

Dan 305-5407

*See memo*

\* \* \* DATA PACKAGE EVALUATION \* \* \*

No evaluation is written for this data package

\* \* \* ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION \* \* \*

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
232601	IRB/PMT-14	01/15/97	06/14/97	Y	Y	Y
232602	RSB/PCRS	01/15/97	06/14/97	Y	Y	Y

IRB BRANCH REVIEW - TSS

Record Number(s)

68563-R: D232597

68563-E: D232602

68563-G: D232608

IN 1/15/97 OUT 2/13/97

EFFICACY

FILE OR REG. NO. as above

PETITION OR EXP. PERMIT NO. \_\_\_\_\_

DATE DIV. RECEIVED 10/24/96 and 12/10/96

DATE OF SUBMISSION 10/18/96 and 12/10/96

DATE SUBMISSION ACCEPTED 1/15/97

TYPE PRODUCTS(S): I, D, H, F, N, R, X, S

DATA ACCESSION NO(S) 441467-10

PRODUCT MER. NO. 14

PRODUCT NAME(S) PEPPER TREAT™ WILD BIRD SEED

COMPANY NAME Snyder Seed Corporation

SUBMISSION PURPOSE registration

CHEMICAL & FORMULATION Various capsaicinoid formulations (see next page)

Efficacy Review: PEPPER TREAT™ WILD BIRD SEED, 68563-R  
SEED SAVER, 68563-E  
SUET WITH PEPPER TREAT, 68563-G  
Snyder Seed Corporation  
West Amherst, NY 14228

## 200.0 INTRODUCTION

### 200.1 Uses

68563-R is a 0.0130% Capsaicin, 0.0095% Dihydrocapsaicin, and 0.0026% Nordihydrocapsaicin treated-seed formulation for which the claim "Keeps birdseed SQUIRREL FREE™" is proposed.

68563-E is a 0.5987% Capsaicin, 0.4004% Dihydrocapsaicin, and 0.0812% Nordihydrocapsaicin treated-seed formulation for which the claim "Keeps birdseed SQUIRREL FREE™" is proposed.

68563-G is a 0.0510% Capsaicin, 0.0301% Dihydrocapsaicin, and 0.0062% Nordihydrocapsaicin treated-suet formulation for which the claim "Keeps suet SQUIRREL FREE™" is proposed.

### 200.2 Background Information

This review discusses the submissions of 10/18/96 which appear to be the initial registration applications for these products. Prior to these submissions, there were discussions and correspondences between EPA and Snyder Seed concerning products of these types. See efficacy review of 6/15/95 for CORR. 286282.

These products appear to be intended to deter tree squirrels from feeding on seeds or suet placed by humans for the purpose of feeding wild birds. At least one such product (66987-1) already is registered to another company.

Most of the "data" submitted for these products originally appeared in a white 3-ring binder which bears no MRID No. Most items in the folder are appeals for data waivers. The several actual study reports for the various disciplines evidently were removed from the binder and assigned MRID numbers individually. Several pages missing from some of the data reports were supplied by FAX on 12/10/96.

## 201.0 DATA SUMMARY

The Confidential Statements of Formula (CSFs) submitted for 68563-R and 68563-G are vague with respect to the respective seed and suet compositions of those products. I feel that the registrant should have to specify the proportions of seeds of each type used in 68563-R or name a specific commercial bird seed product that is to be used, invariably, in the preparation of this product according to its basic CSF. Customers who buy 68563-R should be assured of getting

essentially the same product each time. Customers who want to be able to vary their bird seed offerings should be using 68563-E, rather than a ready-mix. The specific composition of the suet, or the specific commercial product used as the suet component, in 68563-G should be specified in the basic CSF. Again, customers should be able to count on getting the same product each time.

Alternative inert-component formulations could be allowed, as the product is food for nontarget species, but each of these would have to be identified by a distinctive alternate brand name so that customers would be assured of getting the specific mix that they desire.

The sources of capsaicinoids in these 3 products differ. Ground capsicum would be the source for the concentrate product, 68563-E. Oleoresin capsicum would be the source for the suet product, 68563-G. The treated-seeds product, 68563-R, would contain both ground capsicum and oleoresin capsicum.

The efficacy study report submitted on 10/18/96 is cited and discussed immediately below.

Curtis, P.D., Krahling, C.J., and Richmond, M.E. (1996)

Evaluation of capsaicin as an aversive agent to consumption of birdseed by gray squirrels (*Sciurus carolinensis*). Manuscript, Department of Natural Resources, NY Cooperative Fish & Wildlife Research Unit, Cornell U., Ithaca, NY, 13 pp.

MRID# 441467-10

The introduction to this paper cites a number of publications which claim that the physiological mechanism which causes capsaicin to be perceived by mammals apparently is lacking (or lacking in sensitivity) in birds. This difference between these two classes of vertebrates could account for various assertions and test results to the effect that hot pepper suppresses consumption of treated foods by mammals but not by birds. (Due entirely to EPA's efficacy waiver policy, "ground red peppers" -- containing capsaicinoids as the active principles -- was registered in the U.S. in the early 1980's as active ingredients in bird repellent products.)

This report is written as if prepared for publication. Consequently, no raw data are included in the report, which also lacks a number of other important details.

All field testing sites were affiliated with Cornell University in some capacity. Two were located on the main campus, while the third was

"located in a large wooded area . . . in a more rural setting."

Curtis, et al (1996) initially captured gray squirrels and temporarily housed them outdoors. The captured squirrels were anesthetized, ear-tagged, and held 2-24 hr prior to eventual release after recovery. Nineteen squirrels were equipped with radio collars.

The feeding portion of the field trials began with the placing of 600 g of "whole, gray-striped sunflower seeds" (apparently the confectionery type) at each field site for 3 hr each(?) morning beginning on 4/9/96. Seeds were placed on plywood "platform feeders" which stood about 6" off the ground. On 6/3/96, after 8 weeks of offering untreated seeds only, the researchers placed 600 g of "capsaicin-treated seeds" daily at all sites. This practice was continued daily at two sites, including the most rural site, for the next 8 weeks, but was discontinued after 3 weeks at one of the main campus sites, where untreated seed was applied for the last 5 weeks of the study.

The authors present a figure (their "Fig. 1") which suggests that capsaicin treatments suppressed consumption of sunflower seeds (determined by the weigh-back method) to small fractions of the amounts observed when seeds were untreated. At the site where treated seed was applied for only 3 weeks, take of untreated seed rebounded approximately to pre-treatment levels. Presumably, such suppression was due to primarily to the effects of treatments on gray squirrels. Squirrels' visits to feeders also are illustrated on a figure (their "Fig. 2") which suggests somewhat different effects at the 3 test sites. Their "Fig. 3" plots bird use of test sites during the treatment (and posttreatment periods) and indicates that there was potential for birds to take seeds as well. Thus, it is possible that the actual deterrence of squirrels exceeded that which is suggested by their "Fig. 1" because birds could have accounted for some-to-all of the feeding reported during the treatment period. However, it also is possible that the treatment adversely affected seed take by birds as well as squirrels.

The authors report very little in the way of actual numerical results. Those which they do report are summarized, as far as I am able to do so, in the table below. The gaps in the table indicate how incompletely and inconsistently the information relevant to the issues of seed take and animal visitations were reported. The authors report significant treatment-related suppression of the number of squirrels visiting the feeders. No statistical results are discussed for the bird visit data.

PERIOD	MEAN DAILY SEED TAKE (g)	# SQUIRRELS AT FEEDER/DAY (Mean)	# BIRDS AT FEEDER/DAY (Mean)
ALL PRETREATMENT (All Sites)	248.6 g		
LAST 5 WEEKS PRETREATMENT (All Sites)		7.5	
ALL TREATMENT (Sites 1 & 3, treated for 8 wks.)		3.0	
1ST 3 WEEKS TREATMENT (All Sites)	14.6 g		
1ST 3 WEEKS TREATMENT (Site 2 only)			4.1
ALL 5 WEEKS POSTTREATMENT (Site 2 only, treated 3 wks.)	252.2 g	7.6	2.7

The results reported by Curtis, et al (1996) are not inconsistent with claims that capsaicinoids deter feeding by tree squirrels on treated materials. Data consistent with such claims also have been reported by others. As the test material was treated sunflower seeds, it is clear that neither of the two finished Snyder products discussed in this review (68563-R and 68563-G) was used in this test. The report fails to indicate the composition of the capsaicin source product and ratio with which it was mixed with seeds. Thus, it is neither possible to determine whether the specific formulation proposed for 68563-E was used to prepare treated seeds nor whether the treated seeds offered were prepared in the manner indicated on the proposed label for 68563-E.

The efficacy study report cited and discussed below was received by EPA on 5/15/95. The document seems vaguely familiar to me, but I have not been able to locate a review of it. This report apparently has not been assigned an MRID number.

Fitzgerald, C.S., Curtis, P.D., and Richmond, M.E. (1995)  
Capsaicin as a biologically-based aversive agent to  
consumption of birdseed by gray squirrels (*Sciurus  
carolinensis*). Manuscript, Department of Natural  
Resources, NY Cooperative Fish & Wildlife Research Unit,  
Cornell U., Ithaca, NY, 53 pp.

This document appears to have served as an electronic template  
for the report discussed previously. Certain material which  
is largely extraneous where it appears in Curtis, et al  
(1996), appears in context in Fitzgerald, et al (1995). The  
two documents share a common "INTRODUCTION" section, except  
that the one in Fitzgerald, et al (1995) includes an  
additional sentence at the very end.

The Fitzgerald, et al (1995), report indicates that there were  
some squirrel feeding trials conducted in the outdoor cages,  
the construction of which Curtis, et al (1996) elaborate upon  
for no apparent purpose. The cages were about a yard cubed in  
dimensions and were equipped with two stainless steel rodent  
feeding hoppers which could be serviced from outside the cage.  
One hopper was at the designated front of the cage and the  
other at the rear. The cages also included nest boxes and  
"climbing limbs". Captive squirrels

"were provided with water, whole apples, ear corn,  
peanuts, sunflower seeds, and commercial rodent food  
prior to and following all feeding trials."

The researchers caught and held 55 squirrels (up to 24 at a  
time) in these cages, with each individual being kept

"1-3 months during which time they participated in  
various feeding trials."

These squirrels were netted, anesthetized, and marked (fur  
dye) prior to release.

In the feeding trials in which the food hoppers were used,  
either one type of food item was presented in both hoppers, or  
the two hoppers contained foods that were not identical. In  
the latter case, the researchers attempted to counter-balance  
position feeding effects by altering positions of the test  
foods. The researchers also ran trials in which elevated  
feeding stations were used. These trials involved  
simultaneous presentations of 3-4 food items.

The elevated platforms also were used in trials with free-  
ranging (i.e., wild) squirrels. In such trials, 1-4 types of  
food items were presented simultaneously.

Joseph Dunn of Snyder Seed was credited with having prepared



all of the "treated formulations" used in this research. According to the authors,

"The pepper was bound to seeds with a tapioca-based dextrin 'glue'."

Researchers received coded preparations so that they did not know the "concentrations of capsaicin" at the time that the materials were used in testing.

A total of 18 experiments were reported. The first of these was designed to determine whether squirrels showed any preference between gray-striped (confectioners') and black oil-type sunflower seeds. As summarized below, the answer was "No." Consequently, the researchers felt comfortable in using these two types of seeds interchangeably as controls throughout the remainder of the study.

EXP. NO.	NO. SQRLS	ITEMS OFFERED	% OF TOTAL FOOD TAKEN
1	8	25g Gray-striped (GS) sunflower seeds (ut)	49.3%
		25g Blk oil (BO) sunflower seeds (ut)	50.7%

The authors do a poor job of describing their Experiment 2. It appears that they used 4 squirrels and offered them each 20 g of some treated seed or seed mixture. The possible selections appear to have been 4 different mixes of millet, cracked corn, plus treated GS or BO sunflower seeds; treated BO sunflower seeds; treated GS sunflower seeds; and treated sunflower hearts. At 12-hr intervals, the researchers weighed back the amount of food remaining to determine the proportion of that offered which had been consumed.

The results reported were consumption of 28.9%, 56.4%, and 74.6% of the total offered at 12, 24, and 36 hrs, respectively, after initial presentation. As hulls were claimed to have comprised 25% of the initial seed weights, 74.6% was regarded as complete consumption; and the trial was terminated. This trial seems to show that the squirrels would take treated seeds as an alternative to going hungry. However, the authors' Fig. 4 suggests some differences among the specific treated diets and the proportions of total amounts offered taken after 36 hr. Differences in relative hull weights might account for some of this apparent variation. Sunflower hearts, which have no hulls, were consumed at the highest apparent percent of total, but the percent shown in their Fig. 4. is below 70% and two other items (one of the seed mixes and treated BO sunflower seeds) are very close.

In Experiment 3, 8 squirrels were offered pairwise choices

between 20 g of untreated sunflower seeds and 20 g of one of the treated seeds of the types used in Experiment 2. The squirrels then were given a choice between a different type of treated seeds and untreated sunflower seeds on the second day of this 2-day test. Results are summarized below.

FOOD TYPE	TEST DAY	AMOUNT OFFERED	AMOUNT TAKEN	% OF AMOUNT OFFERED TAKEN	% OF TOTAL TAKE FOR DAY
TREATED	1	160 g	132.0 g	82.5%	68.5%
	2	160 g	129.7 g	81.1%	64.5%
UNTREATED	1	160 g	60.8 g	38.0%	31.5%
	2	160 g	71.5 g	44.7%	35.5%

Squirrels may have been a bit less reluctant to take treated seeds on the Day 2 of this trial. The authors' Fig. 5. depicts large differences in acceptance among the 8 treatments. Treated BO seeds and each of the 4 different seed mixes are depicted as having been taken at fractions of the levels reported for control seeds, with the differences being statistically significant. In contrast, treated GS sunflower seeds and treated sunflower hearts were taken at essentially the same rate as untreated sunflower seeds.

Experiment 4 was similar in design to Experiment 3 except that 7 squirrels were used, that 40 g of each selection was offered to each squirrel, and that the test was run for just one day. Another difference is that the numerical results are not reported as thoroughly as for Experiment 3. The researchers selected the 40-g amount because it was the mean amount of daily consumption for live-trapped squirrels in late summer. In Experiment 4, the amount of treated material consumed is reported to have been "63% that of control seed." Again, there were differences in take among seed mixes. These differences (shown in their Fig. 6.) were somewhat like those described for Experiment 3 in that treated sunflower hearts and treated GS sunflower seeds were taken about as readily as untreated sunflower seeds, but the takes of the other types of treated seeds appeared to represent larger fractions of the amount of untreated sunflower seed taken than was the case in Experiment 3.

In Experiment 5, 15 squirrels were offered 25 g treated sunflower hearts and 25 g untreated GS sunflower seed daily for 3 days. Five different treatment levels were used. Each was offered along with untreated GS seed to 3 squirrels each. Test results are summarized below according to hotnesses in Scoville Units (SUs) of the treated sunflower hearts offered.

TREATMENT	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/DAY	% OF AMOUNT OFFERED TAKEN	% OF TOTAL CONTROL TAKE
Untr. GS seeds	25 g	24.1 g	96.4%	100%
G-Glue only	25 g	23.2 g	92.8%	96.3%
F-2,457 SUs	25 g	23.4 g	93.6%	97.1%
E-8,250 SUs	25 g	23.2 g	92.8%	96.3%
D-24,570 SUs	25 g	10.2 g	40.8%	42.3%
C-82,500 SUs	25 g	4.5 g	18.0%	18.7%

Experiment 6 was a replication of Experiment 5, except that the control food was untreated BO sunflower seeds. The results of this trial are summarized below.

TREATMENT	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/DAY	% OF AMOUNT OFFERED TAKEN	% OF TOTAL CONTROL TAKE
Untr. BO seeds	25 g	25.0 g	100%	100%
G-Glue only	25 g	25.0 g	100%	100%
F-2,457 SUs	25 g	23.4 g	93.6%	93.6%
E-8,250 SUs	25 g	23.2 g	93.6%	93.6%
D-24,570 SUs	25 g	18.1 g	72.4%	72.4%
C-82,500 SUs	25 g	12.8 g	51.2%	51.2%

The amounts of treated seeds taken were greater in Experiment 6 than in Experiment 5. This effect could be the result of differences in the control material (which some prior trials had suggested to be unlikely) or to the adaptation of squirrels to capsaicinoids, if the same squirrels were used in both trials. The authors present a Fig. 7. which summarizes the combined results of Experiments 5 and 6 over three test days and suggests increased acceptance of treated sunflower hearts by the third day. If the same squirrels were used for these two trials, the results of Experiment 5 and 6 should have been shown consecutively in the same plot.

In Experiment 7, three groups of 5 squirrels each were offered 30 g of untreated GS sunflower seeds and 30 g of GS seeds treated to hotnesses of 8,250, 27,500, or 82,500 SUs. Results of this trial are summarized below.

TREATMENT	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/DAY	% OF AMOUNT OFFERED TAKEN	% OF TOTAL CONTROL TAKE
Untr. GS seeds	30 g	30.0 g	100%	100%
A-8,250 SUs	30 g	30.0 g	100%	100%
B-27,500 SUs	30 g	29.5 g	98.3%	98.3%
C-82,500 SUs	30 g	28.2 g	94.0%	94.0%

There was no feeding deterrence apparent in this trial at any treatment level. If the same 15 squirrels that were used in Experiments 5 and 6 were used in Experiment 7, these data would be further evidence of adaptation. If not, the data

would be evidence of biological variability. Either way, it is hard to picture long-term relief from squirrel problems at bird feeders based upon data such as these.

In Experiment 8, the researchers used oleoresin capsicum, which was

"derived by distilling *Capsicum* powder in a solvent and evaporating the solvent."

The resultant material was mixed to 100,000 SUs with GS seeds or sunflower hearts and offered at the rate of 100-g/day to squirrels who also were offered 100 g/day of untreated GS seed as a challenge diet. Three squirrels each got oleoresin-treated hearts and 3 got treated GS seeds. Two other groups of 3 squirrels each got the same choices but only 50 g/day of each food. Results of these trials are summarized below.

TREATMENT	DAY	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/DAY	% OF AMOUNT OFFERED TAKEN	% OF TOTAL CONTROL TAKE
Untr. GS	1	50 g	48.28 g	96.6%	100%
	2	50 g	43.82 g	87.6%	100%
	3	50 g	45.77 g	91.5%	100%
GS-100K SUs	1	50 g	0.1 g	0.2%	0.2%
	2	50 g	0.0 g	0%	0%
	3	50 g	0.0 g	0%	0%
HRT-100K SUs	1	50 g	0.5 g	1.0%	1.0%
	2	50 g	0.1 g	0.2%	0.2%
	3	50 g	0.1 g	0.2%	0.2%
Untr. GS	1	100 g	63.8 g	63.8%	100%
	2	100 g	57.5 g	57.5%	100%
	3	100 g	50.6 g	50.6%	100%
GS-100K SUs	1	100 g	0.7 g	1.4%	1.1%
	2	100 g	0.0 g	0%	0%
	3	100 g	0.0 g	0%	0%
HRT-100K SUs	1	100 g	0.6 g	1.2%	0.9%
	2	100 g	0.6 g	1.2%	1.0%
	3	100 g	0.2 g	0.2%	0.4%

These data suggest a powerful treatment effect which might have been due to factors such as the hotness (100,000 SUs) of the treated foods, superiority in repellency of the oleoresin preparation over the powder-dextrin approach, or use of naive squirrels.

Experiment 9 was a partial replication of Experiment 8, except that each challenge diet was an untreated version of the treated diet used (i.e., treated seeds opposed untreated seeds; treated heart opposed untreated hearts). This change

was made "to eliminate the hull-weight discrepancy." Only the 100 g/day groups (3 squirrels each) were run. Test results, summarized below, suggest powerful treatment effects, with possible waning on the third day. The take of lower amounts of untreated hearts than untreated seed might have been due to the aforementioned hull situation.

TREATMENT	DAY	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/DAY	% OF AMOUNT OFFERED TAKEN	% OF TOTAL CONTROL TAKE
Untr. hrts	1	100 g	39.9 g	39.9%	100%
	2	100 g	33.7 g	33.7%	100%
	3	100 g	49.1 g	49.1%	100%
HRT-100K SUs	1	100 g	0.9 g	0.9%	2.3%
	2	100 g	0.0 g	0.0%	0%
	3	100 g	4.2 g	4.2%	8.6%
Untr. GS	1	100 g	71.2 g	71.2%	100%
	2	100 g	76.8 g	76.8%	100%
	3	100 g	66.3 g	66.3%	100%
GS-100K SUs	1	100 g	0.3 g	0.3%	0.4%
	2	100 g	0.0 g	0%	0%
	3	100 g	1.7 g	1.7%	2.6%

Experiment 10 consisted of a 3-day, no-choice offering of 20 g/day of oleoresin-treated sunflower hearts. Seventeen squirrels were used in this trial. Test squirrels consumed an average of just 0.2 g of treated hearts/day, with the highest daily mean being 0.5 g on Day 2. These results suggest that it is possible to make an oleoresin capsicum treatment too hot for squirrels to adapt to over 3 days, even under conditions of hunger.

Because treated seeds "were visibly reddish-orange", the researchers ran Experiment 11 to assess the effects of food-color dyes on seed intake by squirrels. Eighteen squirrels were offered 25 g each of unidentified seeds undyed or dyed red, blue, or yellow. Seeds were offered "cafeteria style" on the elevated platforms discussed above under Curtis, et al (1996). Squirrels consumed means of 8.2 g of the undyed seeds, 7.8 g of the red, 8.2 g of the blue, and 6.6 g of the yellow. The authors report that the differences among these means were not significant.

In Experiment 12 a suet was used as the carrier. The researchers offered 40 g/day of one of 4 suet mixtures and 40 g/day of GS seed to 16 squirrels for 4 consecutive days. The 4 suet mixtures included treatments at three different levels of hotness and untreated suet. As can be seen by the empty cells in the table below, the authors do not report each day's numerical results for all treatments. They do illustrate the results in their Fig. 15, which suggests that the 24,000 SU

suet increased in aversiveness over time while the suet laced to 6,000 and 12,000 SUs were not consistently less palatable than untreated suet. Fig. 15 depicts acceptances of 12,000- and 24,000-SU suet as being significantly below that of GS seeds throughout the test but the 12,000-SU suet was taken far more readily than the 24,000. All suet were accepted significantly less readily than GS seeds on Day 1, but there were no significant differences among suet in the amounts taken on that date.

TREATMENT	DAY	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/DAY	% OF AMOUNT OFFERED TAKEN	% OF TOTAL CONTROL TAKE
Untr. GS	1	40 g			100%
	2	40 g			100%
	3	40 g	34.4 g	86.0%	100%
	4	40 g	32.2 g	80.5%	100%
Untr. Suet	1	40 g			
	2	40 g			
	3	40 g			
	4	40 g	26.4 g	66.0%	82.0%
Suet-6K SU	1	40 g			
	2	40 g			
	3	40 g	30.5 g	76.2%	88.7%
	4	40 g	22.2 g	55.5%	68.9%
Suet-12K SU	1	40 g			
	2	40 g			
	3	40 g			
	4	40 g			
Suet-24K SU	1	40 g			
	2	40 g			
	3	40 g			
	4	40 g			

Overall, Experiment 12 suggests that, given a choice between suet and GS seeds, gray squirrels prefer the seeds. The data further suggest that it may have taken squirrels a while to discover that the suet was treated and that squirrels especially avoided the hottest (24,000 SUs) of the three treated suet used. As no squirrel experienced more than one treated suet in this trial and as there were only 4 squirrels per treatment group, any inferences drawn from this (or many of the other tests discussed above) should be guarded.

For the test that was to be called Experiment 13, Joe Dunn of Snyder provided the researchers with mixtures including treated peanuts and treated sunflower seeds along with untreated cracked corn and millet. The rationale was to treat only the types of food that squirrels favor. A control mix (presumably no seeds treated) and two semi-treated (only peanuts and sunflower seeds being treated) mixes were used.

One of the semi-treated mixtures had twice as much dextrin glue as did the other. Nine squirrels were offered 33 g of each of the 3 mixtures for one day. There were obvious treatment effects, with the 1X-glue formulation being at least as aversive as the 2X-glue mixture.

TREATMENT	AMOUNT OFFERED	AMOUNT TAKEN	% OF AMOUNT OFFERED TAKEN	% OF TOTAL CONTROL TAKE
Untr. mix	33 g	12.0 g	36.4%	100%
Mix w/glue	33 g	0.2 g	0.6%	1.7%
Mix w/2X glue	33 g	1.2 g	3.6%	10.0%

The authors state that the total take of all 3 materials was

"far lower than the typical winter daily consumption (60-100 g) due to the low ration of desirables (sunflower seeds and peanuts) to undesirables (millet and cracked corn) in these mixes.

"Experiment 14 was the first field trial of this series. At an undescribed location, 4 platform feeders were placed. Each of these received 150 g of one of the following: untreated GS seeds or seeds (GS?) treated to 8,250, 27,500, or 82,500 SUs. Seeds were made available for 2-3 hours per day for 6 days.

TREATMENT	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/HR	% OF TOTAL AMOUNT TAKEN	% OF TOTAL CONTROL TAKE
Untr. GS seeds	150 g	25.9 g	85.8%	100%
A-8,250 SUs	150 g	2.3 g	7.6%	8.9%
B-27,500 SUs	150 g	1.2 g	4.0%	4.6%
C-82,500 SUs	150 g	0.8 g	2.6%	3.1%

The results of Experiment 14 suggest powerful deterrent effects for all treatments over a 10-fold range of hotness under the conditions of testing. The conditions of testing probably included the presence of untreated sunflower seeds at all times as the mean rate of consumption of GS seeds times the maximum exposure period (3 hr) gives a product of 77.7 g of seeds, just over half of the amount placed.

Experiment 15 was a seed-color preference test conducted under field conditions with no capsaicin treatments. As in Experiment 11, squirrels were offered 25 g each of unidentified seeds undyed or dyed red, blue, or yellow. These seeds were offered "separately in the four sections of the platform feeders". Means of 5.4 g of the undyed seeds, 4.9 g of the red, 4.8 g of the blue, and 4.8 g of the yellow were removed and presumably consumed. The authors report that the differences among these means were not significant.

Experiment 16 was much like Experiment 14, except that only

one treated and one control type of seeds as used at each site. Placements of 150 g of each food in a pairing were exposed to free-ranging squirrels for 3 hr. There were "12 replicates for each treatment" over a 9-day period, but it is not clear whether more than one test site was involved and whether more than one exposure period was run per day at any one site. The treatments were the same as those used in Experiment 14.

Results of Experiment 16, summarized in the table immediately below, suggest a straightforward concentration or hotness effect. As the presentations of this trial's results are collapsed over time, it is not possible to determine whether there was any waning of effects after repeated exposures.

TREATMENT	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/HR	% OF TOTAL CONTROL TAKE
Untr. GS seeds	150 g	27.2 g	100%
A-8,250 SUs	150 g	18.4 g	67.6%
B-27,500 SUs	150 g	8.7 g	32.0%
C-82,500 SUs	150 g	1.2 g	4.4%

Experiment 17 was patterned after Experiment 16, except that sunflower hearts were used rather than whole seeds. The results obtained in this trial are summarized in the table immediately below. In this case, all capsaicinoid treatments deterred feeding; and there was no statistically significant difference across treatments.

TREATMENT	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/HR	% OF TOTAL CONTROL TAKE
Untr. hearts	150 g	44.9 g	100%
A-8,250 SUs	150 g	10.2 g	22.7%
B-27,500 SUs	150 g	8.9 g	19.8%
C-82,500 SUs	150 g	6.6 g	14.7%

Experiment 18 was a replication of Experiment 14 except for the use of sunflower hearts instead of sunflower seeds. Again, 150 g of treated and untreated material were placed on separate platform feeders were placed. The materials placed included untreated hearts seeds or hearts treated to 8,250, 27,500, or 82,500 SUs. Hearts were made available for 2-3 hours per day for 6 days.



TREATMENT	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/HR	% OF TOTAL AMOUNT TAKEN	% OF TOTAL CONTROL TAKE
Untr. Hearts	150 g	52.9 g	69.6%	100%
A-8,250 SUs	150 g	9.5 g	12.5%	18.0%
B-27,500 SUs	150 g	11.1 g	14.6%	21.0%
C-82,500 SUs	150 g	2.5 g	3.3%	4.7%

The authors report that there were no significant differences among treatments, although the consumption rate for the 82,500-SUs was numerically the lowest of the 3 treatments. The authors report that the researchers had noticed an effect of dominant individuals at the test sites which they believed to be responsible for the somewhat higher consumption of the 27,500-SU hearts than the 8,250-SU hearts. A deliberate manipulation designed to test the dominance hypothesis yielded results that were consistent with it.

Experiment 19 tested "the commercially-produced wild bird seed mixtures" from Experiment 13 under field conditions. The control mix and the 1X-glue and 2X-glue mixes were offered simultaneously in 150-g amounts on elevated platforms for 3-hr periods.

TREATMENT	AMOUNT OFFERED PER DAY	AMOUNT TAKEN/HR	% OF TOTAL AMOUNT TAKEN	% OF TOTAL CONTROL TAKE
Untr. Mix	150 g	49.8 g	79.0%	100%
Mix w/glue	150 g	3.0 g	4.8%	6.0%
Mix w/2X glue	150 g	10.2 g	16.2%	20.5%

Test results are summarized in the table immediately above. There is a clear effect of capsaicinoid treatment. While the marked numerical difference between the treated mixes with 1X and 2X glue is not statistically significance, it is tempting to infer that the hotness is masked by the use of too much glue. It is clear that the 2X-glue treatment does not make the product work better.

Experiment 20 dealt with attempts "to determine the relative amount of sunflower hearts" that wild gray squirrels would consume in 3 hr. It appears that squirrels were offered 600 g of untreated hearts, divided into 150-g portions placed in each quarter of an elevated platform. In the same manner, 600 g of sunflower hearts treated to 8,250 SUs also were exposed. Three 3-hr placement "bouts" were run for the test and control materials. It appears that the treated material was not exposed simultaneously with the untreated hearts.

TREATMENT	AMOUNT OFFERED PER DAY	TEST BOU <b>T</b>	AMOUNT TAKEN/HR	% OF CORRES. CONTROL TAKE
Untr. Hearts	600 g	1	73.2 g	100%
	600 g	2	100.7 g	100%
	600 g	3	125.8 g	100%
		All	99.9 g	100%
A-8,250 SUs	600 g	1	72.8 g	99.5%
	600 g	2	40.2 g	39.9%
	600 g	3	98.1 g	80.0%
		All	70.4 g	70.5%

As an adjunct to Experiment 20, the researchers placed whole sunflower seeds treated to 82,500 SUs in the same test area(s) and in the same manner used for placing treated and untreated sunflower hearts. The overall mean consumption of the 82,500-SU seeds was 20.3 g/hr, with means for individual bouts being 10.0 for the first bout, 27.5 g/hr for the second, and 23.2 g/hr for the third. Possibly, the squirrels learned to tolerate the product over time. They also might have learned how to pace ingestion of treated seeds so as to obtain some nutrition without suffering too much pain.

In their "**DISCUSSION**" of the research covered by their report, Fitzgerald, et al (1995) note that discarding of hulls and "undesirable items" (millet and cracked corn) by squirrels occurred routinely and was not differentiated from reported consumption in some cases, especially Experiments 2-4. They note that both behavioral observations and weighbacks showing virtually no consumption or removal suggest that squirrels are able to detect high levels of capsaicinoids remotely, perhaps by olfaction, vomeronasal detection, or trigeminal or mucosal irritation from airborne particles. Ocular irritation is a possibility not mentioned for squirrels but noted for the researchers (see below).

The authors suggest that Experiments 13 and 19, those involving glue,

"illustrated the usefulness of loose pepper for increasing efficacy."

By this, they seem to mean that the numerically lower consumptions of mixes containing less glue are proof positive that a less complete glue job leaves some free hot particles which can irritate squirrels somewhat remotely (or at least somewhat more rapidly). Although the numerical differences between preparations made at the two glue strengths were not statistically significant, the postulated effect and reason for it do not seem unreasonable.

The authors believe that the sharper and more prolonged aversions seen with free-ranging squirrels than with captive squirrels can be explained by the lack of alternative foods for the latter under the conditions of testing. While this explanation also seems plausible, it is important to recall that their captive squirrels were free-ranging squirrels shortly before they were collected for use in certain experiments. Therefore, it is reasonable to infer that free-ranging squirrels under conditions of extreme hunger (as might be brought on by overpopulation and/or very cold and perhaps snowy weather, also would take treated seeds fairly readily. This circumstance arises for other feeding deterrent chemicals which do not make the target animals ill or kill them. Recognizing this possibility, even under less extreme conditions, the authors state

"that capsaicin's efficacy in reducing consumption of bird seed by squirrels is greatest when offered with a more palatable food choice. People who feed birds should be encouraged to purchase squirrel foods (i.e., untreated seed or ear corn) as well as treated bird seed with the intention of attracting squirrels to the alternative foods."

It also should be remembered that the captive squirrels never were more than a few feet from a source of water. This circumstance might have made mucosal hotness easier to remedy than was the case with free-ranging squirrels.

Coupled with the results of the long-term field trial reported by Curtis, et al (1996), the data reported by Fitzgerald, et al (1995) suggest potential efficacy for products of the types for which Snyder Seed has applied for Federal registrations. It is not possible to proceed from the test results to the product labels because the materials used in the efficacy studies were not described in terms of percents of total or various distinct capsaicinoids. The use of dextrin glue in the production of (some of?) the treated items tested (at least) by Fitzgerald, et al (1995), suggests that specific formulations being proposed for registration actually may not have been field tested. Presumably, making treated suet would not have required use of the glue, but treated suet was not field tested. The critical efficacy issue as far as binding capsaicin sources to treated foods seems to be:

At what degree of "sticking" are the somewhat contradictory needs to retain material on the food and to have some airborne material optimized?

The issue of the appropriate degree of binding of capsaicin sources to treated food raises safety issues as well as the efficacy issues. Below is a passage taken from the report by

Fitzgerald, et al (1995), which pertain to human safety concerns.

"It is worth noting that researchers, too, were visibly affected by some of the treated food items. Continued exposure to volatile pepper dust during weighing resulted in an allergic response, triggering sneezing, tearing, and perspiration. The allergic response was worsened when handling treatments B (27,500 SUs) and C (82,500 SUs) due to the loose pepper particulates abundant in them and frequently produced violent and continuous sneezing and coughing. When researchers accidentally rubbed their eyes or touched their mouths, these areas became irritated. This topical burning sensation was considerably worse when handling oleoresins (H and I). Furthermore, treatments H and I left an oily residue on contact, and required several (>4) vigorous washings with soap and water to remove. Even after the washing, the burning sensation often reappeared when researchers touched a sensitive area (e.g., nose, eyes, lips)."

This text raises a number of concerns about the appropriateness of the precautionary labeling proposed for these products. If the finished baits are hot enough to be effective against hungry squirrels, they would seemingly also have to be hot enough to be potentially bothersome to people. If not, such products would be less than satisfactory from the standpoint of efficacy. The ground peppers concentrate product (68563-E) clearly could be expected to be bothersome to humans, especially to those who -- following proposed label directions -- would be diluting it 1:40 with presumably dry bird seed. For 68563-E, Snyder Seed proposes the signal word "**CAUTION**" and the following precautionary text:

"**Caution.** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling."

This text strikes me as being inadequate in light of the statements made by Fitzgerald, et al (1995), who only handled prepared food formulations.

The proposed labels for these products claim no use sites and hardly claim a pest. The claims (e.g., "Keeps birdseed SQUIRREL FREE™") noted above under "Uses" offers the only clue as to the purpose to which these products are supposed to be put. For 68563-R and 68563-G, the use directions are limited to the text shown immediately below.

#### "DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.  
**Ready to use.** Set out and let the birds enjoy."

The use directions for 68563-E are shown below.

#### "DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.  
**DIRECTIONS.** Mix one part of product with 40 parts bird seed. Set out and let the birds enjoy."

Although these products would appear to be among the easiest of pesticides to use, the proposed use directions seem to me to be too limited and too informal. The use directions should indicate where the products are to be used, the species that the products are claimed to deter from feeding on treated seeds, and specifically what must be done to apply the product. The directions also should indicate any appropriate application-related cautions or limitations.

If 68563-E were mixed as directed, the birdseed-product mixture would be expected to be 0.026% total claimed capsaicinoids, assuming that the concentrate adhered fully to the seed. This capsaicinoid concentration would be reasonably close to the total (0.0251%) being claimed for 68563-R. The total capsaicinoid concentration being claimed for 68563-G is 0.0873 -- more than 3X those claimed for the seed mixtures. Whether there is a specific need for using a higher concentration of active ingredient in the suet is not clear, even after reading Fitzgerald, et al (1995). The capsaicinoids would be on the surface of the seeds but might be mixed throughout the suet. This circumstance would seem to favor raising the capsaicinoid concentration in the suet. On the other hand, the capsaicinoids might be retained better in the suet than they would be if mixed with seeds without a sticking agent. Throw in considerations from discussions (see above) of the possible need for having airborne particles and the situation becomes very confusing.

The combined capsaicinoid concentration claimed for 68563-E is 1.0803%. This is roughly twice the level of "Capsaicin and related compounds" claimed for the registered SQUIRREL AWAY™ product registered to Scrypton Systems of Annapolis, MD. SQUIRREL AWAY™ also is a dry concentrate. The accepted label for SQUIRREL AWAY™ states that 8 g of that product are to be mixed with "eight cups of bird feed". How such a mixture would compare in Scoville Units to the 1:40 dilution proposed for 68563-E is not clear. HOT SAUCE® ANIMAL REPELLENT (72-574, Miller Chemical & Fertilizer Corporation, Hanover, PA) is a liquid product claimed to be 2.5% capsaicin ("From oleoresin

of capsicum") and to deter squirrels from maple syrup collecting equipment when diluted at a ratio of 8 fl. oz. product to 5 gal of petroleum jelly and topically applied to the tubing. The applicability of this dilution ratio to anything claimed for Snyder Seed's 3 products also is not clear. What is clear is that capsaicinoids can deter oral contact by gray squirrels with objects or foods treated to a sufficient degree of hotness, whatever that happens to be (up to 82,500 to 100,000 SUs in some trials discussed above, as low as 8,250 SUs in others)

## 202.0 CONCLUSIONS

[NOTE TO ADMINISTRATIVE REVIEWER: ~~THIS REVIEW DISCUSSES CBI~~ AS WOULD ANY LETTERS WHICH INCLUDED MATERIAL INCORPORATED WITHOUT MODIFICATIONS FROM THE "CONCLUSIONS" SECTION. DO NOT RELEASE THIS REVIEW OR ITS "CONCLUSIONS" SECTION TO ANYONE OTHER THAN EPA EMPLOYEES WITH APPROPRIATE CLEARANCES, THE APPLICANT OR AGENTS AUTHORIZED, IN WRITING, BY THE APPLICANT TO HAVE ACCESS TO CBI PERTAINING TO THESE PRODUCTS. The ingredients statements proposed for these products seem to be inconsistent with what we have done in the past for capsaicin-containing products. These statements should be revised to be consistent with our policies in this regard. The precautionary labeling proposed for these products seem to me to be woefully deficient, especially when the comments (quoted above under "DATA SUMMARY") from researchers who handled only formulated test products are considered.]

### 68563-R

1. Data included in the efficacy reports by Fitzgerald, et al (1995), and Curtis, et al (1996, MRID# 441467-10) indicate that it is possible to discourage feeding by gray squirrels on feeds of the types used at bird feeders by treating all or parts of such feeds with capsaicinoids.

It is not clear from the information provided that the formulation proposed for 68563-R (to the extent that it has been specified) was used in any of the tests discussed in these two reports. The test material described by Curtis, et al (1966) clearly did not correspond to the product described by the Confidential Statement of Formula (CSF) dated "10-18-96" that was submitted for 68563-R. If, as their report suggests, the treated preparations tested by Fitzgerald, et al (1995), contained a dextrin "glue", none of these could have been identical to the product described by the CSF of "10-18-96" for 68563-R. Insufficient information was provided to reconcile the information on the hotness of the formulations offered to squirrels with the active ingredient strengths proposed for this product.

The CSF of "10-18-96" is deficient in that it does not indicate the exact mixture of seeds that would be used in making this product. The report by Fitzgerald, et al (1995) suggests that the composition of the treated material can be important both to squirrels and to birds. The exact composition of the mixture also can be important to users interested in attracting specific types of birds (to the exclusion of others) by using specific types of seeds or seed mixes. Such customers, potentially much of the market for this type of product, need to know that they are getting the same product each time they buy it.

There are two basic ways to specify the exact composition of the "seed" component of this product. The first involves identifying each type of seed and indicating the weight and percent the product comprised by each type used. The second approach involves naming a specific commercially available bird seed product that invariably would be used in the preparation of the product when it was sold under a particular brand name.

Because the seed component of the product is intended to be offered as food for birds and not for squirrels, we would be willing to depart from our typical policy with respect to vertebrate pesticides and permit use of alternate seed formulations for a product such as 68563-R. To take advantage of this exception, you would have to make each alternate formulation in the same basic manner (e.g., if you treat all seeds for the basic formulation you also would have to treat all seeds for all of the alternate formulations). You also would have to keep the percent of each active ingredient claimed constant among all formulations used for the product, submit a CSF specific to each formulation that you intend to make, and propose a distinctive and descriptive alternate brand name for each alternate formulation. If a formulation were made from sunflower seeds, the word "sunflower" should appear in its specific alternate brand name. If the formulation included a mixture of different types of seeds, the alternate brand name for it should include an expression such as "seed mixture". If you intend to offer several mixtures, then each mixture should have a distinctive name. If you have good reasons to believe that a particular preparation would be especially attractive to particular bird types, the alternative formulation for that preparation may allude to those species (e.g., "Snyder's Squirrel Free™ Brand Seed Mix for Sparrows").

2. The label proposed for 68563-R is deficient in several ways related to efficacy concerns.

- a. The label bears no specific claims of sites and pests. The closest that label comes to making a pest claim is the promotional statement "Keeps birdseed SQUIRREL FREE™". That statement is a false and misleading claim of absolute efficacy which common experience and the data that you have submitted refute. There was some feeding by squirrels on virtually all formulations tested. We do not believe that the trademark designation adequately softens this claim because "SQUIRREL FREE™" is being used apart from the trade name proposed for this product and "™" is not a sufficiently prominent indicator that "SQUIRREL FREE" is merely a trade name. A claim consistent with what users might reasonably expect from this product would be

"Bird seed that has been treated to discourage feeding by gray squirrels."

- b. The proposed "**DIRECTIONS FOR USE**" do not indicate what the product is supposed to do, where the product may be used, and how the product should be used. These "directions" also fail to inform users of any special restrictions, limitations, or personal protection needed when applying this product. As this product is proposed as a mixture of seeds and capsicum sources, there are likely to be significant amounts of airborne capsicum particles at times when the product is being applied. As bird feeders are often situated at eye level or above, there are potentials for ocular and mucosal exposures to people who use this product. If these people are pouring the contents of containers directly into feeders, the amount of airborne dust encountered could be very significant, particularly when the containers are being emptied.

The text indicated below would be a great improvement over that which you have proposed.

#### **"DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**Use Restrictions:** This product consists of bird seeds that have been treated to discourage feeding by gray squirrels. This product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground to attract and feed wild birds. Wear rubber gloves when handling



this product. Wear eye and face protection when pouring this product directly from its container and/or when loading this product into feeders situated near or above eye level.

**Application Directions:** Fill feeders or place product on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return."

68563-E

1. Data included in the efficacy reports by Fitzgerald, et al (1995), and Curtis, et al (1996, MRID# 441467-10) indicate that it is possible to discourage feeding by gray squirrels on feeds of the types used at bird feeders by treating all or part such feeds with capsaicinoids. It is not clear from the information provided that the specific formulation proposed for 68563-E was used in the preparation of any of the test materials discussed in these two reports.
2. The label proposed for 68563-E is deficient in several ways related to efficacy concerns.
  - a. The label bears no specific claims of sites and pests. The closest that label comes to making a pest claim is the promotional statement "Keeps birdseed SQUIRREL FREE™". That statement is a false and misleading claim of absolute efficacy which common experience and the data that you have submitted refute. There was some feeding by squirrels on virtually all formulations tested. We do not believe that the trademark designation adequately softens this claim as SQUIRREL FREE™ is being used apart from the proposed name for this product. The "™" does not, in our judgment, adequately indicate that the expression "SQUIRREL FREE™" is merely a trade name. A claim appropriate for what users might be able to expect from this product would be

"A concentrate for treating bird feed to discourage feeding by gray squirrels."
  - b. The proposed "**DIRECTIONS FOR USE**" do a poor job of indicating how to treat bird feeds with the product and fail to indicate what the product is supposed to do, where the product may be used, and exactly how the product should be used. These "directions"

also fail to inform users of any special restrictions, limitations, or personal protection needed when mixing or applying this product. As this product is proposed to be pure ground capsicum, there are likely to be significant amounts of airborne capsicum particles when bird feed is being treated with this product and when the finished mixes are being applied. This product should not be mixed indoors or by anyone in a downwind position. As bird feeders are often situated at eye level or above, there also are potentials for ocular and mucosal exposures to people who apply mixtures made from this product. If these people are pouring the contents of containers directly into feeders, the amount of airborne dust encountered could be very significant, particularly as your mixing directions do not call for use of any sticking agent.

The text indicated below would be a great improvement over that which you have proposed.

#### **"DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**Use Restrictions:** This product may be used to discourage feeding by gray squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where bird feed is placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling this product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 40 parts, by weight, of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 7.5 pounds of feed. [INDICATE HOW MIXING IS TO BE ACHIEVED, AS IN THIS EXAMPLE: Use a container that can be completely sealed and is large enough to

facilitate mixing of the product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete mixing.]

**Application Directions:** Fill feeders with feed treated with this product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return."

Note that the text in brackets [] indicates where you are expected to supply the missing information.

68563-G

1. Data included in the efficacy report by Fitzgerald, et al (1995) suggest that it is possible to discourage feeding by gray squirrels on suet if it has been treated with capsaicinoids. The hotness of the preparation appeared to be a critical factor in determining the extent to which treated suet limited feeding by squirrels.

It is not clear from the information provided that the formulation proposed for 68563-G (to the extent that it has been specified) was used in any of the test discussed by Fitzgerald, et al (1995). The test described by Curtis, et al (1966) clearly did not involve a treated-suet formulation.

The Confidential Statement of Formula (CSF) dated "10-18-96" is deficient in that it does not indicate the exact suet mixture that would be used in making this product. The composition of the treated material could be important both to squirrels and to birds. The exact composition of the mixture also can be important to humans who may be trying to attract specific types of birds (to the exclusion of others) by using specific types of suet or suet/seed mixes. Such customers, potentially much of the market for this type of product, need to know that they are getting the same product each time they buy it.

There are two basic ways to specify the exact composition of the suet component of this product. The first involves identifying each particular ingredient in the suet and listing the weight and proportion of the total formulation (with certified limits) for each ingredient. The second approach involves naming the specific

commercially available bird suet product that invariably would be used in the preparation of the product when it was sold under a particular brand name.

Because the suet component of the product is intended to be offered as food for birds and not for squirrels, we would be willing to depart from our typical policy with respect to vertebrate pesticides and permit use of alternate suet or suet/seed formulations for a product such as 68563-G. To take advantage of this exception, you would have to make each alternate formulation in the same basic manner. You also would have to keep the percent of each active ingredient claimed constant among all formulations used for the product, submit a CSF specific to each formulation that you intend to make, and propose a distinctive and descriptive alternate brand name for each alternate formulation. If a formulation had some sunflower seeds mixed into it, the words "with sunflower seeds" should appear in its specific alternate brand name. If you have good reasons to believe that a particular preparation would be especially attractive to particular bird types, the alternative formulation for that preparation may allude to those species (e.g., "Snyder's Squirrel Free™ Suet for Woodpeckers").

2. The label proposed for 68563-~~E~~ is deficient in several ways related to efficacy concerns.
  - a. The label bears no specific claims of sites and pests. The closest that the label comes to making a pest claim is the promotional statement "Keeps suet SQUIRREL FREE™". That statement is a false and misleading claim of absolute efficacy which is refuted by the limited data that you have submitted. There was some feeding by squirrels on all treated-suet preparations tested. We do not believe that the trademark designation adequately softens this claim because SQUIRREL FREE™ is being used apart from the proposed name for this product. A claim appropriate for what users might be able to expect from this product would be

"Suet that has been treated to discourage feeding by gray squirrels."
  - b. The proposed "**DIRECTIONS FOR USE**" do not indicate what the product is supposed to do, where the product may be used, or specifically how the product should be used. These "directions" also fail to inform users of any special restrictions, limitations, or personal protection needed when applying this product. As this product is proposed

as a mixture of suet and a capsicum source, there amounts of airborne capsicum particles associated with this product would be not be expected to be as great was with a treated seed or a dry concentrate products. Dermal contact with the product might have negative consequences, including transfer of oily, capsaicinoid-impregnated material from finger tips to more sensitive parts of the body. People who handle this product should at least be encouraged to wear protective gloves.

The text indicated below would be a great improvement over that which you have proposed.

#### **"DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**Use Restrictions:** This product consists of suet that has been treated to discourage feeding by gray squirrels. This product may be used in yards around homes and other buildings where suet is dispensed to attract and feed wild birds. Wear rubber gloves when handling this product and avoid touching your eyes and face until you have removed when gloves and washed your hands.

**Application Directions:** Place product in suet dispensers where use by squirrels has been or is likely to be a problem. Replace suet if it is depleted by birds. Repeat use of treated suet if squirrels return."

If this product is to be packaged in plastic for loading into a particular type of suet dispenser, the "**Application Directions:**" may refer to the specific packaging and dispenser.

William W. Jacobs  
Biologist  
Insecticide-Rodenticide Branch  
February 13, 1997

Snyder Seed Corp

12/19/96

Barcode 96  
Active

Summary of 3 Applications

S-515475	.025	1.68563 - R	Pepper Treat Wild Bird Seed
S-515478	<del>1.08</del>	2.68563 - E	Seed Saver
S-515480	1.0873	3.68563 - G	Suet with Pepper Treat

Active : Capsaicin & Related Capsaicinoids

Two Eye Irritation Studies  
need clarification of formatting  
before data can be sent for review.  
called Cathy Stea (847-7407)

Dan Peacock

Note: Before sending for review, I  
need to check that

- 1) data matrix is correct
- 2) determine which eye irritation  
tests go with what product

DP BARCODE: D232608

Eff Dan

CASE: 061090  
SUBMISSION: S515657

DATA PACKAGE RECORD  
BEAN SHEET

DATE: 01/15/97  
Page 1 of 1

\* \* \* CASE/SUBMISSION INFORMATION \* \* \*

CASE TYPE: REGISTRATION ACTION: 166 RESB NEW PRO-OC-MIN CHG  
RANKING : 0 POINTS ()  
CHEMICALS: 070701 Capsaicin (in oleoresin of capsicum) 0.0873%

ID#: 068563-G SUET WITH PEPPER TREAT  
COMPANY: 068563 SNYDER SEED CORP  
PRODUCT MANAGER: 14 WILLIAM JACOBS 703-305-6406 ROOM: CM2 259  
PM TEAM REVIEWER: DANIEL PEACOCK 703-305-5407 ROOM: CM2 221  
RECEIVED DATE: 12/10/96 DUE OUT DATE: 06/18/97

\* \* \* DATA PACKAGE INFORMATION \* \* \*

DP BARCODE: 232608 EXPEDITE: N DATE SENT: 01/15/97 DATE RET.: / /  
CHEMICAL: 070701 Capsaicin (in oleoresin of capsicum)  
DP TYPE: 001 Submission Related Data Package  
CSF: Y LABEL: Y

ASSIGNED TO	DATE	IN	DATE	OUT	ADMIN DUE DATE: 06/14/97
DIV : RD	/	/	/	/	NEGOT DATE: / /
BRAN: IRB	/	/	/	/	PROJ DATE: / /
SECT: PMT-14	/	/	/	/	
REVR :	/	/	/	/	
CONTR:	/	/	/	/	

\* \* \* DATA REVIEW INSTRUCTIONS \* \* \*

Bill,

This is 3rd of 3 Synder Seed products. please review.

Dan

\* \* \* DATA PACKAGE EVALUATION \* \* \*

No evaluation is written for this data package

\* \* \* ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION \* \* \*

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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# NEW REGISTRATION OR NEW EUP

## FAST TRACK \* APPLICATION FOR NEW REGISTRATION

<u>WITH DATA</u>	Init.	Date	<u>NO DATA</u>	Init.	Date
FEU	_____	_____	FEU	_____	_____
Fileroom/JACKETS	_____	_____	Fileroom/JACKETS	_____	_____
SIG (DATA)	_____	_____	PM	_____	_____
Fileroom/JACKETS	_____	_____			
PM	_____	_____			

## REGULAR APPLICATION FOR NEW APPLICATION OR EXPERIMENTAL USE PERMIT

Includes new petition for Tolerance: YES or NO

<u>WITH DATA</u>	Init.	Date	<u>NO DATA</u>	Init.	Date
FEU	<u>DS</u>	<u>10-28-96</u>	FEU	_____	_____
Fileroom/JACKETS	<u>BS</u>	<u>10-28-96</u>	Fileroom/JACKETS	_____	_____
SIG (DATA)	<u>PM</u>	<u>11-4-96</u>	PM	_____	_____
Fileroom/JACKETS	<u>BS</u>	<u>11/4/96</u>			
PM	<u>14</u>	_____			

\* Front End Processing determined this application qualifies for fast track review based of registrants claim of "me-too". No screen for substantial similarity is made by the Front End Processing Section.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

October 28, 1996

• SNYDER SEED CORP  
1576 SWEET HOME RD  
WEST AMHERST, NY 14228

ATTN: JOE A DUNN, PHD

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

PRODUCT NAME: SEED SAVER  
COMPANY NAME: SNYDER SEED CORP  
OPP IDENTIFICATION NUMBER: 257611  
EPA FILE SYMBOL: 68563-E  
EPA RECEIPT DATE: 10/24/96

SUBJECT: RECEIPT OF APPLICATION FOR A NEW REGISTRATION

DEAR REGISTRANT

The Office of Pesticide Programs has received your application for a new registration, and it has passed an administrative screen for completeness.

Please note that this is only a notification of receipt of your application. This is only the first step in the application process, and does NOT constitute approval.

If you have any questions, please contact Bill Jacobs, Acting Product Manager 14 at (703)305-6406.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sheryl J. Traister".

Front End Processing Staff  
Information Services Branch  
Program Management and Support Division



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that

\*\*\*\*\*  
NEW CHEMICAL/FIRST FOOD USE SCREEN  
\*\*\*\*\*

*related  
capsaicinoids*

1. FILE SYMBOL/REG NO (ISB) 68563-E
2. TOLERANCE PETITION NO. (RSB) \_\_\_\_\_
3. CHEMICAL NAME (RSB) Dihydrocapsaicin CAS# 19408-84-5  
Nordihydrocapsaicin CAS# 28789-35-7
4. PESTICIDE CHEMICAL CODE (RSB) 70706  
70707
5. PRODUCT NAME (ISB) SEED SAVER
6. PM (ISB) 14 7. PM TEAM REVIEWER (PM) \_\_\_\_\_
8. DATE OF RECEIPT (ISB) 10/24/96
9. USE PATTERN (PM) \_\_\_\_\_
- 0 DATE OF TRANSMISSION TO PM (ISB) \_\_\_\_\_  
(EPA Receipt Date plus 3 days)
1. DATE OF TRANSMISSION TO HED/EFED/RSB (PM) \_\_\_\_\_  
(PM Receipt Date plus 5 days)
2. HED/EFED/RSB DUE DATE FOR COMPLETION OF SCREEN \_\_\_\_\_  
(HED/EFED Receipt Date plus 10 days)
3. HED/EFED/RSB REVIEWERS:  
HED: TB \_\_\_\_\_ EFED: EEB \_\_\_\_\_  
DEB \_\_\_\_\_ EFGWB \_\_\_\_\_  
OREB \_\_\_\_\_  
RD/RSB \_\_\_\_\_
4. HED/EFED/RSB COMPLETION DATE (HED) \_\_\_\_\_ (EFED) \_\_\_\_\_ (RSB) \_\_\_\_\_
5. SUBMISSION BARCODE (PM) \_\_\_\_\_

REGISTRANT PHONE CONTACT INFORMATION (PM)

DATE OF CONTACT \_\_\_\_\_

PERSON CONTACTED \_\_\_\_\_

TITLE \_\_\_\_\_

DECISION & COMMENTS \_\_\_\_\_

STATUS OF PACKAGE

☐ PASSED  
SCREEN

☐ FAILED  
SCREEN  
(Documentation  
attached) 89

Date: 10/24/96  
Pages: 1

Time: 11:59 AM  
Fax Number:

10/24/1996 11:55 7166361477

SNYDER SEED

PAGE 01

## SNYDER SEED CORPORATION

October 24, 1996

441466-00

Mr. Dan Peacock (CM-2 H7505C)  
Office of Pesticide Programs (Teams 14)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, DC 20460

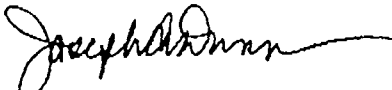
Reference: New Product Application  
Pepper Treat™ Wild Bird Seed (EPA File Symbol: 68563-R)  
Suet with Pepper Treat™ (EPA File Symbol: 68563-~~B~~) **G**  
Seed Saver (EPA File Symbol: 68563-~~B~~) **E**

Dear Mr. Peacock:

Snyder Seed Corporation is respectfully submitting new product application packages for the three above-mentioned end-use products. The active ingredients in these products are capsaicin and related capsaicinoids. Because the properties of these active ingredients are known and since the percent of actives is low, we are requesting that these products be approved in a timely manner.

Please call me at 716-636-5107 if you have any questions or if I may be of further assistance.

Sincerely,



Joseph A. Dunn, Ph.D.  
President

96 OCT 24 P 2:08

RECD EPA/OPP/DPD1

TX

MRID No.

68563-E

# Seed Saver

## Table of Contents

Guideline Reference Number	Test Description	Tab	Source
151-10	Product Identity	1	Confidential Statement of Formula Admin
151-11	Manufacturing Process 44146601	2	Snyder Seed, 1996
151-12	Formation of Impurities 44146602	3	Snyder Seed, 1996
151-13	Preliminary Analysis 44146603	4	Snyder Seed, 1996
151-15	Certified Limits	5	Confidential Statement of Formula
151-16	Analytical Method	6	Snyder Seed, 1996 Admin

### Physical and Chemical Characteristics

151-17a	Color	7	Snyder Seed, 1996
151-17b	Physical State	8	Snyder Seed, 1996
151-17c	Odor	9	Snyder Seed, 1996
151-17f	Bulk Density	10	waiver
151-17g	Solubility	11	waiver
151-17i	pH	12	waiver
151-17	Oxidizing or Reducing Action	13	waiver
151-17k	Flammability	14	waiver
151-17	Explosibility	15	waiver
151-17l	Storage Stability	16	Snyder Seed, 1996
151-17m	Viscosity	17	waiver
151-17n	Miscibility	18	waiver
151-17o	Corrosion Characteristics	19	Snyder Seed, 1996
151-15	Dielectric Breakdown Voltage	20	waiver

### Ecological Effects

154-	Avian Acute Oral, Avian Dietary, Freshwater Fish, and Freshwater Invertebrate	21	waiver
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### Toxicology

152-10	Acute Oral Toxicity	22	waiver
152-11	Acute Dermal Toxicity	23	waiver
152-12	Acute Inhalation Toxicity	24	waiver
152-13	Primary Eye Irritation	25	Hazleton, 1996 Snyder Seed, 1996
152-14	Primary Dermal Irritation	26	Hazleton, 1996 Snyder Seed, 1996

## Seed Saver

### Table of Contents (continued)

Guideline Reference Number	Test Description	Tab	Source
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#### *Toxicology (continued)*

152-15	Dermal Sensitization	27	waiver
152-16	Hypersensitivity	28	waiver
152-18	Immunotoxicity	29	waiver

#### *Product Performance*

96-6	Squirrels	30	Cornell University, 1996
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Admin

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>E</del>		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 1 of 7	
5. Applicant's Name and Address: Snyder Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
151-10	Product identity	X	10-96				Tab 1
151-11	Manufacturing process Manufacturing Process for Seed Saver	X	10-96				Tab 2
151-12	Formation of impurities Formation of Impurities for Seed Saver	X	10-96				Tab 3
151-13	Analysis of samples Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Seed Saver	X	10-96				Tab 4
151-15	Certified Limits	X	10-96				Tab 5
151-16	Analytical method Analytical Method for High Pressure Liquid Chromatography of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Snyder Seed Corporation's Raw Materials and Products	X	10-96		68563-R Tab 6		Tab 6

96 OCT 24 P 2:26

REC'D EPA/OPD1

TO X DATA MATRIX 68563-E

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>8</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 2 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated October 1996		7. Name of Active Ingredient: Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b. Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
PHYSICAL AND CHEMICAL PROPERTIES							
151-17a	Color Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	dark brown to red	Tab 7
151-17b	Physical State Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	solid	Tab 8
151-17c	Odor Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	very pungent	Tab 9
151-17f	Bulk Density	X	10-96	waiver			Tab 10
151-17g	Solubility	X	10-96	waiver			Tab 11
151-17i	pH	X	10-96	waiver			Tab 12
151-17	Oxidizing/reducing reaction	X	10-96	waiver			Tab 13
151-17k	Flammability	X	10-96	waiver			Tab 14
151-17	Explodability	X	10-96	waiver			Tab 15

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>G</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 3 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
PHYSICAL AND CHEMICAL PROPERTIES (continued)							
151-17l	Storage stability Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	refer to study	Tab 16
151-17m	Viscosity	X	10-96	waiver			Tab 17
151-17n	Miscibility	X	1-096	waiver			Tab 18
151-17o	Corrosion characteristics Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	none	Tab 19
151-17	Dielectric breakdown voltage	X	10-96	waiver			Tab 20

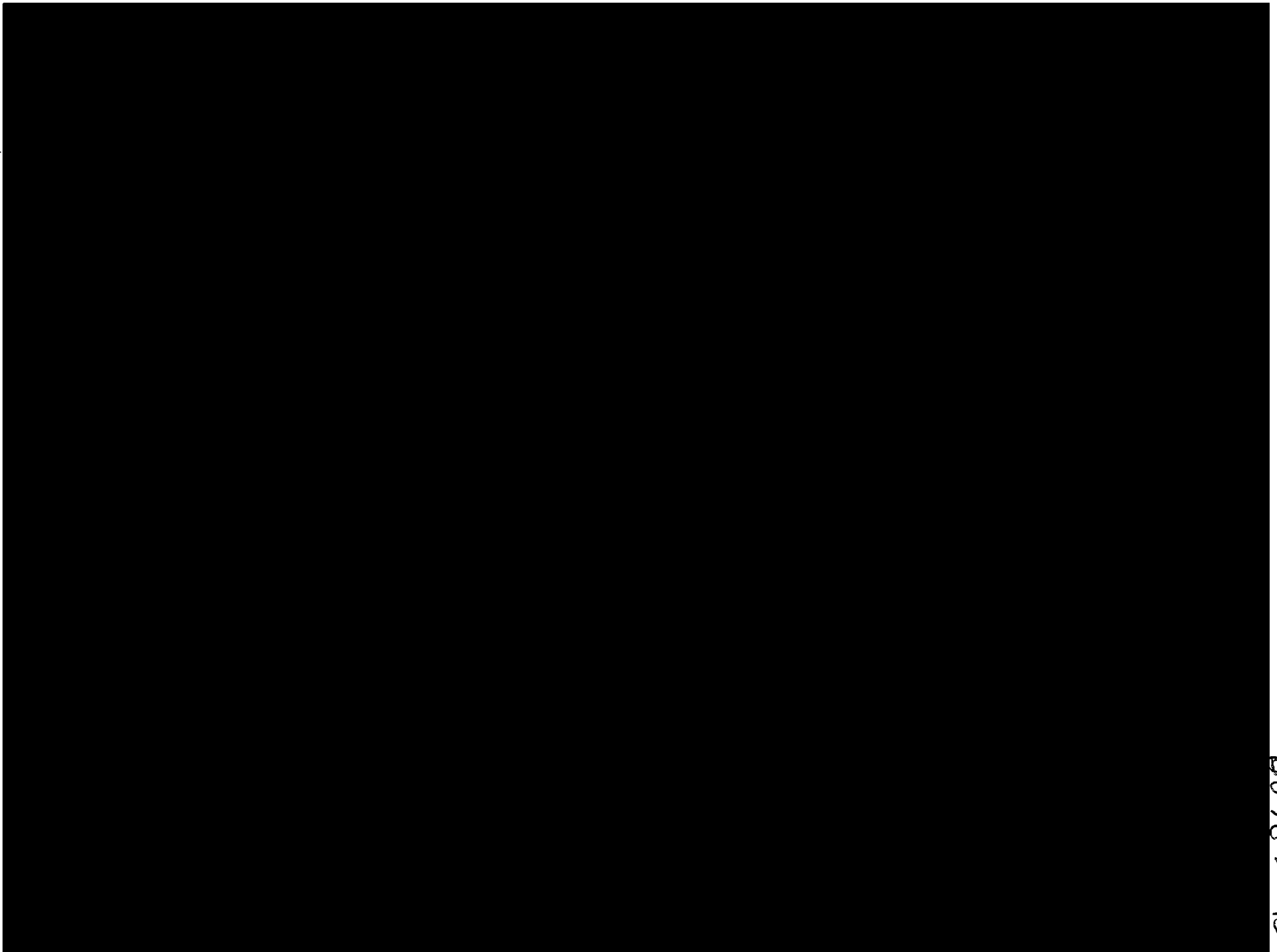


1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563-Q E		3. Formulator's Exemption Selected __ Yes <u>X</u> No		4. Page 4 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
	ECOLOGICAL EFFECTS						
154-6 154-7 154-8 154-9	Avian Acute Oral Avian Dietary Freshwater Fish LC50 Freshwater Invertebrate LC50	X	10-96	waiver			Tab 21

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>6</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 5 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
	TOXICOLOGY						
152-10	Acute oral toxicity	X	10-96	waiver			Tab 22
152-11	Acute dermal toxicity	X	10-96	waiver			Tab 23
152-12	Acute inhalation	X	10-96	waiver			Tab 24
152-13	Primary eye irritation Primary Eye Irritation Study of Ground Capsicum (Cayenne) 200,000 SHU in Rabbits	X	10-96		68563-R Tab 27	Clear of positive reactions by 72 hours (Category III)	Tab 25
	Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Ground Capsicum (Cayenne)	X	10-96		68563-R Tab 28		Tab 25
152-14	Primary dermal irritation Primary Dermal Irritation Study of Ground Capsicum (Cayenne) 200,000 SHU in Rabbits	X	10-96		68563-R Tab 30	Moderately irritating (Category III)	Tab 26
	Primary dermal irritation Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Ground Capsicum (Cayenne)	X	10-96		68563-R Tab 28		Tab 26

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>Q</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 6 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated October 1996		7. Name of Active Ingredient: Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b. Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
	TOXICOLOGY (continued)						
152-15	Dermal sensitization	X	10-96	waiver			Tab 27
152-16	Hypersensitivity	X	10-96	waiver			Tab 28
152-18	Immunotoxicity	X	10-96	waiver			Tab 29

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>R</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 7 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11.  Result	12.  Location in submission
	PRODUCT PERFORMANCE						
96-6	Squirrels Evaluation of Capsaicin as an Aversion Agent to Consumption of Birdseed by Gray Squirrels ( <i>Sciurus carolinensis</i> )	X	10-96		68563-R Tab 34	Reduced squirrel daily consumption of birdseed from 248.6 g to 14.6 g	Tab 30



68563-1E

DAN

MRID No.

68563-E  
(1d2)

# Seed Saver

## Table of Contents

Guideline Reference Number	Test Description	Tab	Source
151-10	Product Identity	1	Confidential Statement of Formula
151-11	Manufacturing Process	2	Snyder Seed, 1996 441466-01
151-12	Formation of Impurities	3	Snyder Seed, 1996 441466-02
151-13	Preliminary Analysis	4	Snyder Seed, 1996 441466-03
151-15	Certified Limits	5	Confidential Statement of Formula
151-16	Analytical Method	6	Snyder Seed, 1996
<i>Physical and Chemical Characteristics</i>			
151-17a	Color	7	Snyder Seed, 1996
151-17b	Physical State	8	Snyder Seed, 1996
151-17c	Odor	9	Snyder Seed, 1996
151-17f	Bulk Density	10	waiver
151-17g	Solubility	11	waiver
151-17i	pH	12	waiver
151-17	Oxidizing or Reducing Action	13	waiver
151-17k	Flammability	14	waiver
151-17	Explodability	15	waiver
151-17l	Storage Stability	16	Snyder Seed, 1996
151-17m	Viscosity	17	waiver
151-17n	Miscibility	18	waiver
151-17o	Corrosion Characteristics	19	Snyder Seed, 1996
151-15	Dielectric Breakdown Voltage	20	waiver
<i>Ecological Effects</i>			
154-	Avian Acute Oral, Avian Dietary, Freshwater Fish, and Freshwater Invertebrate	21	waiver
<i>Toxicology</i>			
152-10	Acute Oral Toxicity	22	waiver
152-11	Acute Dermal Toxicity	23	waiver
152-12	Acute Inhalation Toxicity	24	waiver
152-13	Primary Eye Irritation	25	Hazleton, 1996 Snyder Seed, 1996
152-14	Primary Dermal Irritation	26	Hazleton, 1996 Snyder Seed, 1996

68563-E  
(20/21)

**Seed Saver**  
Table of Contents (continued)

Guideline Reference Number	Test Description	Tab	Source
<i>Toxicology (continued)</i>			
152-15	Dermal Sensitization	27	waiver
152-16	Hypersensitivity	28	waiver
152-18	Immunotoxicity	29	waiver
<i>Product Performance</i>			
96-6	Squirrels	30	Cornell University, 1996

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>E</del>		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 1 of 7	
5. Applicant's Name and Address: Snyder Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated October 1996		7. Name of Active Ingredient: Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b. Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
151-10	Product identity	X	10-96				Tab 1
151-11	Manufacturing process Manufacturing Process for Seed Saver	X	10-96				Tab 2
151-12	Formation of impurities Formation of Impurities for Seed Saver	X	10-96				Tab 3
151-13	Analysis of samples Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Seed Saver	X	10-96				Tab 4
151-15	Certified Limits	X	10-96				Tab 5
151-16	Analytical method Analytical Method for High Pressure Liquid Chromatography of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Snyder Seed Corporation's Raw Materials and Products	X	10-96		68563-R Tab 6		Tab 6

96 OCT 24 P2:26

RECD EPA/OPP/OPD1

DATA MARK 68563-E



1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563-Q E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 2 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
PHYSICAL AND CHEMICAL PROPERTIES							
151-17a	Color Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	dark brown to red	Tab 7
151-17b	Physical State Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	solid	Tab 8
151-17c	Odor Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	very pungent	Tab 9
151-17f	Bulk Density	X	10-96	waiver			Tab 10
151-17g	Solubility	X	10-96	waiver			Tab 11
151-17i	pH	X	10-96	waiver			Tab 12
151-17	Oxidizing/reducing reaction	X	10-96	waiver			Tab 13
151-17k	Flammability	X	10-96	waiver			Tab 14
151-17	Explosability	X	10-96	waiver			Tab 15

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>G</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 3 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
PHYSICAL AND CHEMICAL PROPERTIES (continued)							
151-17l	Storage stability Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	refer to study	Tab 16
151-17m	Viscosity	X	10-96	waiver			Tab 17
151-17n	Miscibility	X	1-096	waiver			Tab 18
151-17o	Corrosion characteristics Physical and Chemical Characteristics of Pepper Treat™ Wild Bird Seed, Suet with Pepper Treat™ and Seed Saver	X	10-96		68563-R Tab 7	none	Tab 19
151-17	Dielectric breakdown voltage	X	10-96	waiver			Tab 20

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>Q</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 4 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
	ECOLOGICAL EFFECTS						
154-6 154-7 154-8 154-9	Avian Acute Oral Avian Dietary Freshwater Fish LC50 Freshwater Invertebrate LC50	X	10-96	waiver			Tab 21

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>A</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 5 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
	TOXICOLOGY						
152-10	Acute oral toxicity	X	10-96	waiver			Tab 22
152-11	Acute dermal toxicity	X	10-96	waiver			Tab 23
152-12	Acute inhalation	X	10-96	waiver			Tab 24
152-13	Primary eye irritation Primary Eye Irritation Study of Ground Capsicum (Cayenne) 200,000 SHU in Rabbits	X	10-96		68563-R Tab 27	Clear of positive reactions by 72 hours (Category III)	Tab 25
	Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Ground Capsicum (Cayenne)	X	10-96		68563-R Tab 28		Tab 25
152-14	Primary dermal irritation Primary Dermal Irritation Study of Ground Capsicum (Cayenne) 200,000 SHU in Rabbits	X	10-96		68563-R Tab 30	Moderately irritating (Category III)	Tab 26
	Primary dermal irritation Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Ground Capsicum (Cayenne)	X	10-96		68563-R Tab 28		Tab 26

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>6</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 6 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11. Result	12. Location in submission
	TOXICOLOGY (continued)						
152-15	Dermal sensitization	X	10-96	waiver			Tab 27
152-16	Hypersensitivity	X	10-96	waiver			Tab 28
152-18	Immunotoxicity	X	10-96	waiver			Tab 29

1. Product Name Seed Saver		2. EPA Reg. No./File Symbol 68563- <del>R</del> E		3. Formulator's Exemption Selected _ Yes <u>X</u> No		4. Page 7 of 7	
5. Applicant's Name and Address: Sndyer Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228		6. Application for Registration Dated  October 1996		7. Name of Active Ingredient:  Capsaicin, Dihydrocapsaicin, and Nordihydrocapsaicin			
8. 40 CFR Part 158 DATA REQUIREMENTS		9. SOURCE OF DATA SATISFYING REQUIREMENT					
8a. Guideline Reference Number	8b.  Name of Test	9a. Submitted by Applicant	9b. Date Submitted	9f. N.A. or waiver	10. MRID Number	11.  Result	12. Location in submission
	PRODUCT PERFORMANCE						
96-6	Squirrels Evaluation of Capsaicin as an Aversion Agent to Consumption of Birdseed by Gray Squirrels ( <i>Sciurus carolinensis</i> )	X	10-96		68563-R Tab 34	Reduced squirrel daily consumption of birdseed from 248.6 g to 14.6 g	Tab 30

MRID No.

68563-E  
(1 of 2)

# Seed Saver Table of Contents

Guideline Reference Number	Test Description	Tab	Source
151-10	Product Identity	1	Confidential Statement of Formula
151-11	Manufacturing Process	2	Snyder Seed, 1996 441466-01
151-12	Formation of Impurities	3	Snyder Seed, 1996 441466-02
151-13	Preliminary Analysis	4	Snyder Seed, 1996 441466-03
151-15	Certified Limits	5	Confidential Statement of Formula
151-16	Analytical Method	6	Snyder Seed, 1996
<i>Physical and Chemical Characteristics</i>			
151-17a	Color	7	Snyder Seed, 1996
151-17b	Physical State	8	Snyder Seed, 1996
151-17c	Odor	9	Snyder Seed, 1996
151-17f	Bulk Density	10	waiver
151-17g	Solubility	11	waiver
151-17i	pH	12	waiver
151-17	Oxidizing or Reducing Action	13	waiver
151-17k	Flammability	14	waiver
151-17	Explosibility	15	waiver
151-17l	Storage Stability	16	Snyder Seed, 1996
151-17m	Viscosity	17	waiver
151-17n	Miscibility	18	waiver
151-17o	Corrosion Characteristics	19	Snyder Seed, 1996
151-15	Dielectric Breakdown Voltage	20	waiver
<i>Ecological Effects</i>			
154-	Avian Acute Oral, Avian Dietary, Freshwater Fish, and Freshwater Invertebrate	21	waiver
<i>Toxicology</i>			
152-10	Acute Oral Toxicity	22	waiver
152-11	Acute Dermal Toxicity	23	waiver
152-12	Acute Inhalation Toxicity	24	waiver
152-13	Primary Eye Irritation	25	Hazleton, 1996 Snyder Seed, 1996
152-14	Primary Dermal Irritation	26	Hazleton, 1996 Snyder Seed, 1996

68563-E  
(2/2)

**Seed Saver**  
Table of Contents (continued)

Guideline Reference Number	Test Description	Tab	Source
<i>Toxicology (continued)</i>			
152-15	Dermal Sensitization	27	waiver
152-16	Hypersensitivity	28	waiver
152-18	Immunotoxicity	29	waiver
<i>Product Performance</i>			
96-6	Squirrels	30	Cornell University, 1996



NOTE: Relationship between source for products & products (68563-R, -E, -G) & 4 acute tox tests

	68563 - R	- E	- G
% Active label	.0251	1.68 (dilute 1 to 40) (final 90.0263)	0.0873 <del>1.68</del>
% Active (SIF)		no results	Sweet Cake (3inger)
ready-to-use?	YES	No: Mix 1 to 40	YES
1			
+			
1/50 dilution			
1/50 dilution			
Source	Ground Capsicum + Oleoresin of Capsicum	ground capsicum	Oleoresin of Capsicum
4 Acute Tox Tests & Test Substance			
Primary eye	1/50 dilution of oleoresin of Capsicum 441892-01		
Primary eye	ground Capsicum 441892-02		
primary dermal	1/50 dil. of oleoresin of Capsicum 441467-08		
primary dermal	ground Capsicum 441467-09		

286282

AUG 21 1995

350 5-481539

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351 5-492386

38

Snyder Seed Corporation  
1576 Sweet Home road  
West Amherst, New York 14228

Attention: Mr. Joseph A. Dunn

Subject: Data Requirements for Capsaicin Rodent Repellents  
Your letters of January 25 and May 8, 1995

To register a product for any one of the four use patterns outlined in your letter, you would need the following data and other information:

A. Labeling and Forms

We recommend that you obtain a copy of EPA's "General Information on Applying for Registration of Pesticides in the United States", 2nd Edition. You can order this publication from the National Technical Information Service (NTIS) in Springfield, Virginia. The telephone number for NTIS is 703-487-4640, and the Order No. is "PB92-221811.

Another helpful NTIS publication (PB-95159818) is entitled the Label Review Manual, which explains the finer parts of developing a pesticide label and provides additional guidance to 40 CFR 156.10.

If, however, you simply need copies of registration forms and other key registration documents, such as copies of the FIFRA or regulations, you can simply call 703-308-8341.

B. Product Chemistry - Source material

1. Submit the percentage of Capsaicin in your source product.
2. Submit a specification sheet.

C. Product Chemistry - end-use product

1. Submit the product chemistry data for this product. See the enclosed list of requirements.

D. Acute Toxicology -

1. Eye Irritation Study
2. Skin Irritation Study

You can also satisfy this requirement by citing a similar product to yours in place of doing studies.

#### E. Efficacy data

Submit the results of data conducted with your product for the following use patterns:

1. Deterrence from feeding on wild bird diet by Eastern Gray Squirrels.
2. Deterrence from feeding on treated poultry feed by Norway rats, roof rats, and house mice.
3. Deterrence from damaging treated boxes.
4. Deterrence from damaging surfaces treated by paint.

Studies should be well designed scientific experiments with appropriate control groups. We suggest that you seek the services of individuals with experience in conducting efficacy trials with rodent repellents and that protocols of proposed studies be submitted for our review before you begin trials.

If you wish to discuss testing with someone on our staff, you can reach Dr. William Jacobs at 703-305-6406.

#### F. Fish and Wildlife Data

We will not require submission of any data. However, you will need the following text under the standard "Environmental Hazards" heading:

Do not contaminate water when disposing of equipment washwater or rinsate.

Any data submitted to us for review (such as that with your May 3, 1995, letter) must be in accordance with PR Notice 86-5.

If you have any questions about this letter, contact Mr. Dan Peacock at 703-305-5407 or 305-6600.

Sincerely yours,

Robert A. Forrest  
Product Manager (14)  
Insecticide-Rodenticide Branch  
Registration Division (H7504C)

Enclosures: 1. Data requirements  
2. Format label

Peacock WP#6;A:CAPSAICI\SNIDER.:305-5407,-6600:8/21/95

- 44146707 Dunn, J.; Schregel, W. (1996) Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Ground Capsicum (Cayenne). Unpublished study prepared by Snyder Seed Corp. 11 p.
- 44146708 Glaza, S. (1996) Primary Dermal Irritation Study of 1/50 Dilution of Oleoresin of Capsicum (1,000,000 SHU) in 20% Dextrin/Water Solution in Rabbits: Final Report: Lab Project Number: CHW 60103553: TP3014: 60103553. Unpublished study prepared by Corning Hazleton Inc. 27 p.
- 44146709 Glaza, S. (1996) Primary Dermal Irritation Study of Ground Capsicum (Cayenne) 200,000 SHU in Rabbits: Final Report: Lab Project Number: CHW 60103555: 60103555: TP3014. Unpublished study prepared by Corning Hazleton Inc. 27 p.
- 44146710 Curtis, P.; Krahling, C.; Richmond, M. (1996) Evaluation of Capsaicin as an Aversive Agent to Consumption of Birdseed by Gray Squirrels (*Sciurus carolinensis*). Unpublished study prepared by Cornell University. 13 p.
- 
- 44151000 Snyder Seed Corp. (1996) Submission of Product Chemistry Data in Support of the Application for Registration of Suet with Pepper Treat. Transmittal of 2 Studies.
- 44151001 Snyder Seed Corp. (1996) Formation of Impurities for Suet with Pepper Treat. Unpublished study. 5 p.
- 44151002 Dunn, J.; Schregel, W. (1996) Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Suet with Pepper Treat. Unpublished study prepared by Snyder Seed Corp. 11 p.
- 
- 44189200 Snyder Seed Corp. (1996) Submission of Toxicity Data in Support of the Application for Registration of Pepper Treat Wild Bird Seed. Transmittal of 2 Studies.
- 44189201 Glaza, S. (1996) Primary Eye Irritation Study of <sup>20% Dextrin/Water Solution</sup> ~~Ground~~ <sup>1/50 Dilution of</sup> Capsicum ~~(Cayenne)~~ (1,000,000 SHU) in Rabbits: Final Report: Lab Project Number: CHW 60103554: ~~60103555~~. Unpublished study prepared by Corning Hazleton, Inc. 29 p.
- 44189202 Glaza, S. (1996) Primary Eye Irritation Study of Ground Capsicum (Cayenne) 200,000 SHU in Rabbits: Final Report: Lab Project Number: CHW 60103556: TP3015. Unpublished study prepared by Corning Hazleton, Inc. 31 p.

*List of Data for*  
*EPA File Symbols 68563-R, -E, and -G* *Page 1 of 2*

- 44146600 Snyder Seed Corp. (1996) Submission of Product Chemistry Data in Support of the Application for the Registration of Pepper Treat Wild Bird Seed, Suet with Pepper Treat and Seed Saver. Transmittal of 3 Studies.
- 44146601 Snyder Seed Corp. (1996) Manufacturing Process for Seed Saver. Unpublished study. 5 p.
- 44146602 Snyder Seed Corp. (1996) Formation of Impurities for Seed Saver. Unpublished study. 5 p.
- 44146603 Dunn, J.; Schregel, W. (1996) Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Seed Saver. Unpublished study prepared by Snyder Seed Corp. 11 p.
- 
- 44146700 Snyder Seed Corp. (1996) Submission of Product Chemistry, Toxicity and Efficacy Data in Support of the Application for Registration of Pepper Treat Wild Bird Seed. Transmittal of 10 Studies.
- 44146701 Snyder Seed Corp. (1996) Manufacturing Process for Pepper Treat Wild Bird Seed: Lab Project Number: 02-12-5. Unpublished study. 5 p.
- 44146702 Snyder Seed Corp. (1996) Formation of Impurities for Pepper Treat Wild Bird Seed. Unpublished study. 5 p.
- 44146703 Dunn, J.; Schregel, W. (1996) Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Pepper Treat Wild Bird Seed. Unpublished study prepared by Snyder Seed Corp. 11 p.
- 44146704 Dunn, J.; Schregel, W. (1996) Analytical Method for High Pressure Liquid Chromatography Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in Snyder Seed Corporation's Raw Materials and Products. Unpublished study prepared by Snyder Seed Corp. 22 p.
- 44146705 Dunn, J.; Schregel, W. (1996) Physical and Chemical Characteristics of Pepper Treat Wild Bird Seed, Suet with Pepper Treat and Seed Saver. Unpublished study prepared by Snyder Seed Corp. 11 p.
- 44146706 Dunn, J.; Schregel, W. (1996) Preliminary Analysis of Capsaicin, Dihydrocapsaicin and Nordihydrocapsaicin in 1/50 Dilution of Oleoresin of Capsicum (1,000,000 SHU) in 20% Dextrin/Water Solution. Unpublished study prepared by Snyder Seed Corp. 11 p.

Date: 10/24/96

Time: 11:59 AM

Pages: 1

Fax Number:

10/24/1996 11:55 7166361477

SNYDER SEED

PAGE 01

## SNYDER SEED CORPORATION

October 24, 1996

Mr. Dan Peacock (CM-2 H7505C)  
Office of Pesticide Programs (Teams 14)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, DC 20460


Reference: New Product Application  
Pepper Treat™ Wild Bird Seed (EPA File Symbol: 68563-R)  
Suet with Pepper Treat™ (EPA File Symbol: 68563-E)  
Seed Saver (EPA File Symbol: 68563-G)

Dear Mr. Peacock:

Snyder Seed Corporation is respectfully submitting new product application packages for the three above-mentioned end-use products. The active ingredients in these products are capsaicin and related capsaicinoids. Because the properties of these active ingredients are known and since the percent of actives is low, we are requesting that these products be approved in a timely manner.

Please call me at 716-636-5107 if you have any questions or if I may be of further assistance.

Sincerely,



Joseph A. Dunn, Ph.D.  
President

REC'D  
96 OCT 24 P 2:25  
DPD1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

January 16, 1997

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Background on Snyder's Three Squirrel Repellent Products  
Pepper Treat Wild Bird Seed  
EPA File Symbol 68563-R  
Seed Saver  
EPA File Symbol 68563-E  
Suet with Pepper Treat  
EPA File Symbol 68563-G

FROM: Dan Peacock, Biologist  
PM Team 14

TO: Reviewers (Efficacy, Chemistry, and Toxicology)

To make your reviews of these products easier, I am providing some background on these products. In addition, I am clarifying confusing aspects of these submissions: the proper designation of the two "new" actives (Dihydrocapsaicin and Norhydrocapsaicin); the % and source of actives and need to dilute before use; and the reason for two sets of acute toxicity tests.

A. Background

On August 21, 1995, we provided Snyder Seed with a list of data requirements for these and other Capsaicin Rodent Repellents. See attached letter.

B. Proper Designation of "New" Actives

When the Agency received these three applications, the applicant listed three actives on its labels:

1. Capsaicin
2. Dihydrocapsaicin
3. Nordihydrocapsaicin

The inprocessing unit noted that the last two ingredients were "new" and proposed a "New Chemical/First Food Use Screen" for them.

Actually, these two ingredients are not "new". In the past, they were included 1) as "Related Compounds", prior to the 1992 Capsaicin Reregistration Eligibility Decision (RED) and 2) as "Related Capsaicinoids" after the 1992 Capsaicin RED. I would prefer to include these two ingredients as "Related Capsaicinoids".

C. % and Source of Actives and Need to Dilute

1. 68563-R: .0251% Capsaicin & related Capsaicinoids  
Source: Ground Capsicum & Oleoresin of Capsicum  
Ready-to-use
2. 68563-E: 1.08% Capsaicin & related Capsaicinoids  
Source: Ground Capsicum  
Mix 1 to 40 with bird food
3. 68563-G: 0.0873% Capsaicin & related Capsaicinoids  
Source: Oleoresin of Capsicum  
Ready-to-use

D. Need for Two Sets of Acute Toxicity Tests

In our August 21, 1995, letter we specified one of each study. However, because the company had two types of sources (Ground Capsicum & Oleoresin of Capsicum), they elected to run tests on each source.

Also, attached to this memorandum is an annotated bibliography from the Pesticide Document Management System (PDMS)

Attachments: 1. EPA's August 21, 1995, letter to Snyder Seed  
2. Annotated Bibliography from the PDMS

Peacock WP#11:A:Capsaici\68563.MEM:305-5407,-6600:1/16/97





United States  
Environmental Protection Agency  
Washington, DC 20460

Form Approved  
OMB No. 2070-0060  
Approval Expires 05-31-95

Certification with Respect to Citation of Data

Applicants Name and Address

Snyder Seed Corporation  
1576 Sweet Home Road  
West Amherst, NY 14228

EPA File Symbol/Registration Number

68563-E

Product Name

Seed Saver

Date of Application

October 1996

**NOTE:** If your product is a 100% repackaging of another EPA-registered product that you purchase, and is labeled for the same uses, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

1. This application is supported by all data submitted or cited in the application. In addition, if cite-all options are indicated, this application is supported by all data in the Agency's files that concern the properties or effects of this product that is identical or substantially similar and that is one of the types of data that would be required to be submitted if this application sought the initial registration of a product of identical or similar composition and intended uses under the data requirements in effect on the date of approval of this application. (Check the appropriate boxes, in items 2 and 3, or 4 below that pertain to your application.)

2. I certify that, for each study cited in support of this application for registration that is an exclusive use study.

☒ I am the original submitter\*; or

☐ I have obtained the written permission of the original submitter for \_\_\_\_\_, which is  
(insert name of chemical)  
\_\_\_\_\_ (for multiple chemicals link the companies who are original data submitters  
(insert names of companies)  
with the appropriate chemical name) to cite that study\*

3. I certify that, for each study cited in support of this application for registration that is not an exclusive use study;

a. ☒ I am the original data submitter\*; or

☐ I have obtained the written permission of the original data submitter for \_\_\_\_\_, which is  
(insert name of chemical)  
\_\_\_\_\_ (for multiple chemicals link the companies who are original data submitters  
(insert names of companies)  
with the appropriate chemical name) to cite that study\*; or

b. ☐ I have notified in writing the companies \_\_\_\_\_ for \_\_\_\_\_ that  
(insert names of companies) (insert name of chemical)

have submitted data I have cited to support this application and have offered to: (a) Pay compensation for those data in accordance with section 3(c)(1)(F) and 3(c)(2)(D) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); and (b) Commence negotiations to determine which data are subject to the compensation requirement of FIFRA and the amount and terms of compensation due, if any. The companies I have notified are:

Companies \_\_\_\_\_ for \_\_\_\_\_ (for multiple  
(insert names of companies) (insert name of chemical)  
chemicals link the companies who are original data submitters with the appropriate chemical name)  
listed on the Pesticide Data Submitters List for all active ingredients contained in my product (cite-all  
method or cite-all option under Selective Method\*). (Also, sign the General Offer Statement below.)  
Companies \_\_\_\_\_ for \_\_\_\_\_ (for multiple  
(insert names of companies) (insert name of chemical)  
chemicals link the companies who are original data submitters with the appropriate chemical name)  
that have submitted the studies which I have cited (Selective method\*).

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4. ☒ I certify that for each study cited in support of this application I am not required to offer data compensation or obtain written permission because all time periods for exclusive use and data compensation have expired.

\* A Data Matrix identifying these studies is attached. (Note: a Data Matrix is not required under the cite-all method)

Signature

Name and Title Joe A. Dunn, Ph.D., President

Date 10.18.96

General Offer to Pay: I hereby offer and agree to pay compensation to other persons, with regard to the approval of this application, to the extent required.

Signature

Name and Title

Date

#### Paperwork Reduction Act Notice

The public reporting burden for this collection of information is estimated to average 2.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining needed data, and completing and reviewing this application form. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 401 M Street, S. W., Washington, DC 20460; and to Office of Management and Budget, Paperwork Reduction Project (2070-0055), Washington, DC 20503, marked "Attention Desk Officer for EPA."



United States  
Environmental Protection Agency  
Washington, DC 20460

☒ Registration  
☐ Amendment  
☐ Other

OPP Identifier Number

257611

### Application for Pesticide - Section I

1. Company/Product Number 68563-E	2. EPA Product Manager Dan Peacock	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Seed Saver	PM# 14	
5. Name and Address of Applicant (Include ZIP Code) Snyder Seed Corporation 1576 Sweet Home Road West Amherst, NY 14228 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

### Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

### Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____	
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.	No. per container
Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 3 oz		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

### Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Joe A. Dunn, Ph.D.	Title President	Telephone No. (Include Area Code) 716-636-5107
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title President	
4. Typed Name Joe A. Dunn, Ph.D.	5. Date 10-18-96	

## PAPERWORK REDUCTION ACT NOTICE and INSTRUCTIONS

**PAPERWORK REDUCTION ACT NOTICE:** Public reporting burden for this collection of information is estimated to average 0.85 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, (2136), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460.

**INSTRUCTIONS:** This form is to be used for all applications for new registration, and use reregistration, amendment, resubmission, to applications for notifications, final printed labeling, reregistration, etc. In order to process an application for a new registration submitted on this form, the following material must accompany the application:

1. Certification with Respect to Citation of Data (EPA Form 8570-29). [If not exempted by 40 CFR 152.81 (b) (4)];
2. Confidential Statement of Formula (EPA Form 8570-4);
3. Formulator's Exemption Statement (EPA Form 8570-27);
4. Five copies of draft labeling;
5. Three copies of any data submitted;
6. Authorization letter where applicable;
7. Matrices where applicable.

**Submission of Labeling** - Labeling should first be submitted in the form of draft labels with all applications for new registration. Such draft labels may be in the form of typed label text on 8.5 x 11 inch paper for submission or a mockup of the proposed label. If prepared for mockup, it should be constructed in a way as to facilitate storage in an 8.5 x 11 inch file. Mockup labels significantly smaller than 8.5 x 11 inches should be mounted on 8.5 x 11 inch paper for submission.

**Submission of Data** - Data submitted in support of this application must be submitted in accordance with PR Notice 86-5.

**SPECIFIC INSTRUCTIONS:** Please read the instructions listed below before completing this application. First determine the type of registration action, listed in Block A, for which you are submitting this application. For applications submitted in connection with New Registration actions, Sections I, III, and IV must be completed by the applicant. For applications submitted in connection with amended reregistration actions, resubmissions, notifications, reregistrations, etc., Sections I, II, and IV must be completed by the applicant.

**Block A** - Check the appropriate action for which you are submitting this form.

**SECTION I** - This section must be completed, as applicable, for all registration actions.

1. **Company/Product Number** - Insert your Company Number, if one has been assigned by EPA. This number may have been assigned to you as a basic registrant, a distributor, or as an establishment. If your product is registered, insert the Product Number.
2. **EPA Product Manager** - If known, fill in the name and PM number of the EPA Product Manager.
3. **Proposed Classification** - Specify the proposed classification of this product.
4. **Product Name** - Enter the complete product name of this pesticide as it will appear on the label. The name must be specific to this product only. Duplication of names is not permitted among products of the same company. Do not include any brand name or company line designations.
5. **Name and Address of Applicant** - The name of the firm or person and address shown in your application is the person or firm to whom the registration will be issued. If you are acting in behalf of another party, you must submit authorization from that party to act for them in registration matters. An applicant not residing in the United States must have an authorized agent residing in the United States to act for them in all registration matters. The name and complete mailing address of such an agent must accompany this application.
6. **Expedited Review** - FIFRA section 3 (c) 3 (B) provides for expedited review of applications for registration, or amendments to existing registrations, that are similar or identical to other pesticide products that are currently registered with the EPA. In order for your application to be eligible for expedited review, you must provide us with the EPA Registration Number and product name of the product you believe is similar to or identical to your product. The product must be similar or identical in both formulation and labeled uses.

**SECTION II** - This section must be completed for all applications submitted to amend the registration only of a currently registered product (Amendment), for a resubmission in response to an Agency letter, for notifications to the Agency, for the submission of final printed labeling, for reregistration and for any other action that pertains to a specific EPA-registered product. This section is not to be used for a new application for registration.

1. **Subject of submission** - Check the applicable block and provide the Agency letter date if appropriate. Provide a brief explanation of the purpose(s) for the submission, such as "the addition of a site, pest or crop (specify)"; "amend the Confidential Statement of Formula by..."; "reregistration submission"; "general label revision of use directions." Attach a separate page if additional space is needed.

**SECTION III** (Packaging and Container Information) - This Section must be completed for all applications submitted in connection with new registration or applicable amendments.

1. **Type of Packaging** - Check the appropriate block if your product will be packaged in the indicated packaging types. Indicate the size of the individual packets and number per retail container.
2. **Type of Retail Container** - Indicate type of container in which product will be marketed.
3. **Location of Net Contents** - Indicate the location of the net contents information for your product.
4. **Size(s) of Retail Container** - Specify the net contents of all retail containers for your product.
5. **Location of Use Directions** - Indicate the location of the use directions for your product.
6. **Manner in which label is affixed to product** - Indicated the method product label is attached to retail container.

**SECTION IV** (Contact Point) - This Section must be completed for all applications for Registration actions, i.e., new products registration, resubmission, "me-too," reregistration, etc.

- 1-5. Self-explanatory.
6. EPA Use Only.

# MATERIAL TO BE ADDED TO JACKET

REG #

68563-2

Description:

CORRESPONDENCE: LETTER TO MR. WILLIAM D. SCHREGER,

SNYDER SEED CORP., INC.

check all that apply	
<input checked="checked" type="checkbox"/>	new stamped accepted label
<input type="checkbox"/>	new CSF
<input type="checkbox"/>	notification

Send to CSC

## Instructions:

Attach this sheet to the top of **ALL** material sent to the file room (both loose paper and new material in jackets). This sheet will be imaged; a clear description will aid in finding material in the e-jacket. Remove staples from all material. If returning loose paper then hold together with a binder or paper clip. CSFs should be placed in the CSF folder (if returning jacket) or covered with a red CBI sheet (if returning loose paper). Material to be returned to file room should be place in the appropriate bin.

Reviewer's

Name:

VINCENT FRANCO

Date:

03/31/08

Phone:

(703)-308-1238

Division:

BPPD

COPY

NOV 19 1998

Mr. William D. Schregel  
Synder Seed Corporation Inc.  
1576 Sweet Home Road  
Amherst, NY 14228

Subject: Product Labeling for Seed Saver®  
EPA Registration Number 68563-2

Dear Mr. Schregel:

Thank you for your FAX dated October 29, 1997 regarding the assignment of the wrong registration number on the label for Synder Seed Corporation's, Seed Saver®. Please accept our apology for this error and any inconvenience to your company. As you requested, we have approved your proposed label amendment (mixing directions) and enclosed is a stamped copy of the product label.

If you have any questions, please do not hesitate to contact Richard King at (703) 308-8052.

Sincerely,



Janet L. Andersen, PhD.  
Director  
Biopesticide and Pollution  
Prevention Division (7501C)

enclosure:

[NEW FRONT LABEL (EPA # 68563-2)]

**SQUIRREL FREE INC**  
Seed Saver

A concentrate for treating bird feed to discourage feeding by tree squirrels.  
Contains all food grade ingredients.

**ACTIVE INGREDIENTS**

Capsaicin and Related  
Capsaicinoids\*.....1.08%

**INERT**  
**INGREDIENTS**.....98.92%

**TOTAL**.....100%

\*Made from Ground Hot Peppers

**KEEP OUT OF REACH OF CHILDREN**

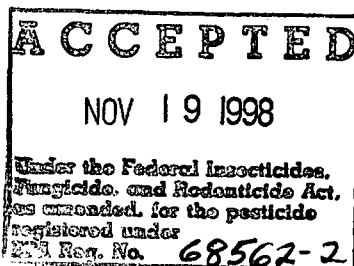
**CAUTION:** Strong, temporary irritant to eyes, nose and skin. Avoid contact with treated bird feed. Wash thoroughly with soap and water after handling. Do not allow children to use this product.

**FIRST AID**

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

See back label for additional statements.



1576 Sweet Home Road • Amherst • New York • 14228  
716-636-5107 • 716-636-3630

**Snyder Seed Corporation****[NEW BACK LABEL (EPA # 68563-2)]****PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water. Do not contaminate water when disposing of equipment washwater or rinsate.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**Mixing Directions:** Outdoors, in a protected area out of the wind, mix one part of this product with 120 parts (by weight) of the type of bird feed that you intend to apply. This ratio would be achieved if the entire contents of this package were mixed with 22.5 pounds of feed. Use a container that can be completely sealed and is large enough to facilitate mixing of this product with the amount of feed that you intend to treat. Close top of container securely and shake container thoroughly, inverting the container occasionally to promote complete mixing.

**Use Restrictions:** This product may be used to discourage feeding by gray, red, and fox squirrels on feeds used to attract and nourish wild birds. Feed treated with this product may be used in yards around homes and other buildings where seeds are placed in feeders or on the ground. Wear eye and face protection and rubber gloves when mixing or handling the product, and/or when loading feeds made from this product into feeders situated near or above eye level. Do not mix this product indoors or in a downwind position.

**Application Directions:** Fill feeders with feed treated with product or place such feed on the ground in the manner appropriate for the species of birds that you are trying to attract and feed. Repeat use if squirrels return.

**STORAGE & DISPOSAL**

**STORAGE:** Store Product and treated feed in secure container, in a dry place inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Wrap container and discard in trash.

Manufactured for:  
**SQUIRREL FREE INC.**  
A Subsidiary of Snyder Seed Corporation  
1576 Sweet Home Road  
West Amherst, NY 14228

EPA Reg. No.: 68563-2      EPA Est. No.: 30120-OH-1  
NET WEIGHT 3 oz.

1576 Sweet Home Road • Amherst • New York • 14228  
716-636-5107 • 716-636-3630





\*Manufacturing process information may be entitled to confidential treatment\*